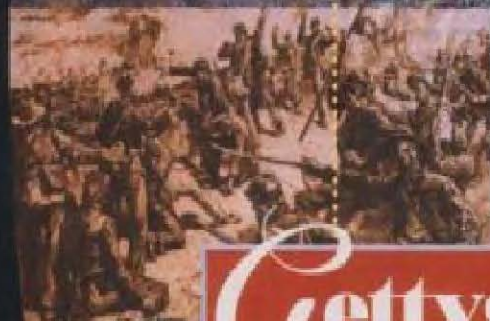


IV



1863



Gettysburg



PC CD-ROM
WINDOWS

TABLE OF CONTENTS

1.0 INTRODUCTION	2	Phase Menu	9
2.0 THE BASICS OF PLAY	2	Units Menu	10
HEX OUTLINES	3	Melee Menu	10
THE HOT SPOT	3	Reinforce Menu	10
THE TOOLBOX	3	Status Menu	10
SELECTING UNITS	3	Display Menu	11
FORMATIONS	3	A/I Menu	12
FACING	4	Modem Menu	12
MOVEMENT	4	Options Menu	13
Column Movement	4	Help Menu	13
COMBAT	5	4.3 THE MAP	14
Ranged Fire	5	Scrolling	14
Melee	5	Place Names	14
LEADERS	6	Hex Coordinates	15
QUALITY	6	4.4 THE UNIT LIST	15
DISRUPTION	6	Unit-List Icons	16
ROUT	6	The Pop-Up Selection Dialog	16
RALLY	6	The Terrain Info Box	17
FATIGUE	6	Selecting a Unit	17
SUPPLY	6	4.5 THE TOOLBOX	17
TERRAIN	7	4.6 THE STATUS BAR	18
STACKING	7	4.7 SAVING A GAME	18
3.0 CHOOSING A SCENARIO	7	4.8 SNAPSHOTS	18
3.1 THE MENU SCREEN	7	5.0 THE UNIT TYPES	18
3.2 THE SCENARIO SELECTION SCREEN	8	5.1 UNIT ICONS	19
3.3 THE TYPES OF A/I	8	NATO-Icon Colors	19
3.4 RESUMING A SAVED GAME	9	5.2 LEADERS	19
4.0 THE GAME INTERFACE	9	Command & Leadership	19
4.1 THE TITLE BAR	9	5.3 ARTILLERY	20
4.2 THE MENU BAR	9	5.4 AMMO & SUPPLY WAGONS	20
File Menu	9	Artillery Ammo	20

6.0 PLAYING A SCENARIO	21
6.1 TERRAIN	21
Breastworks	21
Bridges, Creeks & Streams	21
6.2 VICTORY CONDITIONS	22
Objectives	23
6.3 USING THE A/I	24
Semiautomatic A/I & Organizations	24
Unknown-Unit Markers	25
6.4 GAME TURNS	25
6.5 THE SEQUENCE OF PLAY	25
6.6 MOVEMENT	25
Reinforcements	26
6.7 COMBAT	26
Ranged Fire	27
Ranged-Fire Resolution	28
Melee	29
Semi-Auto Melee	29
Auto-Melee	29
A/I Melee	29
Melee Resolution	29
Morale Checks	30
Disruption & Rout	31
6.8 RALLY	31
Command Radius/Rating	32
6.9 FATIGUE	33
7.0 MODEM PLAY	33
7.1 STARTING A NEW MODEM-PLAY SCENARIO	33
7.2 ENCRYPTION KEY	35
7.3 RESUMING A SAVED MODEM-PLAY GAME	36
7.4 NULL-MODEM PLAY	36
8.0 APPENDIX	37
8.1 TERMS & DEFINITIONS	37
8.2 HOT KEYS	39

BATTLEGROUND: Gettysburg

Volume II

1.0 INTRODUCTION

BATTLEGROUND: GETTYSBURG is an historical strategy game dealing with the epic confrontation between the armies of the North and the South on July 1-3, 1863. The Gettysburg area is represented by a "hand-drawn" map, taken from some of the most detailed sources available. A series of battles, called scenarios, is presented for play on this map. Each hexagon (hex) on the map represents an area 125 yards wide (a mile equals 14 hexes), and each Game Turn represents twenty minutes in a daytime turn or one hour in a night turn.

2.0 THE BASICS OF PLAY



After picking a scenario to play (see 3.0 CHOOSING A SCENARIO), you and your computer or human opponent maneuver, attack and defend with units representing *regiments* of infantry and cavalry (each strength factor—"ST #" in the Unit List—represents 100 men) plus artillery *batteries* (each strength factor represents one gun) and individual *leaders*. Your goal in each scenario is to either capture or hold specific objectives, while trying to eliminate as many of the opponent's units as possible. However, you must also husband your own forces, for the casualties suffered by each side are added to the other side's victory-point total. For more details see 6.2 VICTORY CONDITIONS. For illustrations of all the unit icons, see 5.1.

The visibility in a daytime turn is limited only by the presence of LOS (line of sight) obstacles. In a night turn the visibility is restricted to one hex.

Each Player Turn consists of four phases: *Movement*, *Defensive Fire*, *Offensive Fire*, and *Melee*. Two consecutive Player Turns (one for each side) having the same turn number comprise a Game Turn. When the specified number of Game Turns has been played, the scenario ends and the victor is announced.



Each time you Select the “find next stack” Toolbox button, the program will indicate and Select a unit on the map that has not yet conducted an action in the current phase. This lets you check for units you might have forgotten to move or fire before going on to the next phase.



To advance the game to the next phase, Select the “advance to next phase” Toolbox button.



At the start of each new phase, the *Phase Box* appears in order to announce the phase and give the current turn number. Left-click with the mouse on the Box to begin the phase—or right-click on it to begin

the phase and make it disappear *automatically* after a few seconds each time it appears afterwards.

HEX OUTLINES

The concept of “hexes” is very important to successfully grasping the fundamentals of movement and attack ranges. Since the hex outlines are “off” by default at start, it is strongly recommended that you make them visible by Selecting the **Hex Outlines** command in the **Options** menu when you begin your first game.

THE HOT SPOT

The red square- or hexagon-shaped indicator that appears on the map is known as the Hot Spot. The hex currently containing the

Hot Spot is called as the Hot Spot hex.

THE TOOLBOX

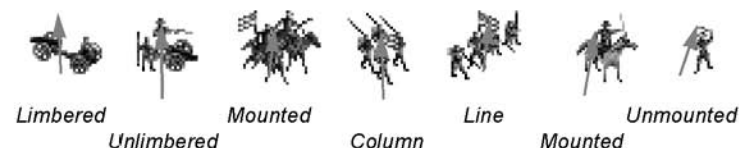
The Toolbox enables you to conduct certain actions without having to use the pop-down menus. Selecting a Toolbox button initiates the command associated with it. Some are explained here, but for a full listing of its buttons and commands see 4.5.

SELECTING UNITS

You must *Select* a unit before you can have it conduct an action. To do so, first Select the hex it occupies by left-clicking with the mouse in that hex, then left-click with the mouse in that unit’s data area in the Unit List at the bottom of the screen. (For an alternative method, see THE POP-UP SELECTION DIALOG on p.16.) You can opt to Select more than one unit in a hex, which will enable you to move (or attack with) all of them at the same time. *All* the units in a hex can be Selected at once by double-clicking with the left mouse button in that hex.

If you *right-click* in a unit’s data area in the Unit List, you will see its organizational information.

FORMATIONS



Infantry is always in either *line* or *column* Formation. Line represents the men lined up “shoulder-to-shoulder” for attacking or defending. Column represents their being either in marching order or in “column of companies” attack formation. Cavalry and leaders are always in either *mounted* or *dismounted* Formation. Artillery is always in either *limbered* (i.e., hooked up to its horses and ammunition caissons) or *unlimbered* (ready to fire) Formation. Supply wagons are always in column Formation. Infantry in column, mounted cavalry/leaders and limbered artillery have an increased movement allowance but cannot attack [Exception: infantry in column and mounted cavalry can engage in *Melee*] and are more vul-

nerable to enemy attacks. Unlimbered artillery cannot move except to change Facing within its hex.



You can change a unit's Formation only during its Movement Phase. (**IMPORTANT:** *Infantry* and *dismounted cavalry* can change Formation only before it begins to move.) To change a unit's Formation, Select the unit, then Select the "change Formation" button in the Toolbox. To find how to tell what a unit's current Formation is, see UNIT-LIST ICONS on p.16.

FACING



All units, regardless of their present Formation, have a *Facing*—i.e., always face towards one of their hex's hexsides.

IMPORTANT: The current Facing of each regiment and battery determines its *Field of Fire* (i.e., its directional ability to attack and defend); see 6.7 COMBAT. You do not have to change a unit's Facing in order to move it.



You can change a unit's Facing only during its Movement Phase. To change its Facing, Select the unit, then Select one of the "change Facing" buttons in the Toolbox. One button changes the Facing clockwise, one hexside at a time; the button next to it does likewise but in a counter-clockwise direction; and the third button makes the unit do an "about face".

MOVEMENT

You can move your units only during their Movement Phase. One way to move a unit is to Select it, then right-click in a hex adjacent to it. You can continue right-clicking in adjacent hexes until the unit either is where you wish it to stop or has used all of its movement allowance.

Another way is to use "drag-and-drop". Select the unit, place the cursor on that unit's hex, press and hold down the left mouse button, move the cursor to the hex you wish to move the unit to, and then release the mouse button. The program will move the unit from hex to hex for you, using the path that costs it the least to take.

A third way to move a unit is by *Auto Movement*. To use this method, Select the unit, then hold down the **Alt** key and right-click

in the hex you wish that unit to move to. The program will move the unit from hex to hex for you, using the path that costs it the least to take.

Each Formation change a unit makes, and each Facing change made by infantry in line or dismounted cavalry, costs it a portion of its movement allowance; these costs are listed under Change Costs in **Parameter Data**, which can be found by Selecting **Scenario Notes** in the **Help** menu. See also 6.1 TERRAIN for the effects of terrain (including roads, etc.) on movement.

Unless Fog of War is in effect for the opposing side, the most recent movement (or Facing/Formation change) made by a unit can be undone by holding down the **Ctrl** key and pressing **U**, provided that unit is *still* Selected.



Selecting either the "highlight moved units" Toolbox button or the **Moved Units** command in the **Display** menu will highlight all units that have moved thus far in the Movement Phase.

Column Movement

You can use *column movement* to move as a single entity a group of units that are stacked together and/or in a string of adjacent hexes. There are two types of column movement: *organization* and *chain*.

To conduct *organization* column movement, Select the hex occupied by the "leading" unit; then Select a unit in that hex, hold down the **Ctrl** key and *right-click* in the adjacent hex you wish that unit to move to. As it moves, all units in the group that belong to the Selected unit's organization (brigade, division, etc.) will follow it. (To see a unit's organizational information, right-click in its data area in the Unit List.)

To conduct *chain* column movement, Select the hex occupied by the "leading" unit; then, after making sure that *no* unit in that hex is Selected, hold down the **Ctrl** key and *right-click* in the adjacent hex you wish that unit to move to. As it moves, the entire group will follow, with each unit in turn entering the hex just vacated by the one in front of it. Note, however, that chain column movement will not work in a hex that has two or more friendly units adjacent to it *if* those units are in different hexes *and* are adjacent to each other, or if the "leading" unit is adjacent to two or more units in different hexes.

Column movement can also be conducted using *Auto Move-*

ment (see above). To do so, hold down both the **Ctrl** and **Alt** keys when you right-click in the hex you wish the "leading" unit to move to.



COMBAT

There are two basic types of combat in the game: *Ranged Fire* and *Melee*. A regiment or battery that takes casualties due to combat has its strength factor ("ST #") in the Unit List) lowered by one or more; and if its ST# is reduced to zero in this manner the unit is eliminated. See below for more details. The combat results tables for both types of combat appear in **Parameter Data**, which can be found by Selecting **Scenario Notes** in the **Help** menu. **IMPORTANT:** Each regiment and battery has a *Field of Fire* that it cannot attack outside of; see 6.7.

Ranged Fire

Ranged Fire is simply one regiment or battery shooting at another at a range of one or more hexes. You conduct Ranged Fire during the Offensive Fire Phase of your Player Turn and the Defensive Fire Phase of your opponent's Player Turn. During that fire phase, each of your units that is able to fire can make one Ranged-Fire

attack, and that attack can be made vs. only one enemy unit. Routed units, and those that are out of ammunition and/or facing "away from" (see 6.7) the enemy cannot attack. Artillery that unlimbered or moved (even just to change Facing) in the Movement Phase cannot fire in the ensuing Offensive Fire Phase. See also 6.7 COMBAT, RANGED FIRE on p.27, and RANGED-FIRE RESOLUTION on p.28.

To use Ranged Fire, Select the regiment or battery that will fire, then right-click in the *target* hex.

Another way to conduct Ranged Fire is to use "drag-and-drop". Select the unit that will fire, then place the cursor on that unit's hex, press and hold down the left mouse button, move the cursor to the target hex, and then release the mouse button.

A third method is termed *Auto Fire*. Hold down the **Alt** key and right-click in the target hex. A dialog box will appear, listing the name and location of one your units that is eligible to fire at that hex. If you Select **OK** in the box, that unit will fire.

Melee

A *Melee* occurs when one side attempts to advance one or more of its infantry or cavalry regiments into an *adjacent*, enemy-occupied hex during the Melee Phase. Routed/Disrupted units, artillery, supply wagons, and regiments facing "away from" (see 6.7) the adjacent enemy cannot advance into a Melee. Only mounted cavalry (and one or more accompanying mounted leaders) can advance into a hex that contains mounted cavalry. A unit can attack in Melee only once per Melee Phase. If all defending units are eliminated or forced to retreat, the attacking unit(s) will automatically occupy the defending hex.



One easy way to conduct Melees is to use "drag-and-drop". To do this, Select all the units in a hex which you wish to attack with, then place the cursor on that hex, press and hold down the left mouse button, move the cursor to the adjacent hex you wish to attack, and then release the mouse button. Repeat this for each hex that contains one or more units you wish to add to that Melee, then resolve the attack by Selecting the "resolve Melee" Toolbox button.

For more details, see 6.7 COMBAT, MELEE on p.29, and MELEE RESOLUTION on p.29.

LEADERS



Each brigade, division, corps and army has its own historical leader. A leader provides no benefit to movement or Ranged-Fire attacks, but can aid in Melee attack/defense and lower the chance that a unit he is stacked with will Rout. Most importantly, however, a leader can use his Command and Leadership ratings to aid Disrupted/Routed units *under his command* in their attempts to Rally. The proper positioning of brigade and division leaders is vital to maintaining the cohesion of one's forces. For more details see 4.4 THE UNIT LIST, 5.2 LEADERS and 6.8 RALLY.

QUALITY

Each regiment and battery has a *Quality* rating ("Q" in the Unit List) of "A" (best), "B", "C", "D", "E" or "F". The program uses this rating at various times to make die rolls ("A" = "6", "F" = "1") to determine if the unit will Disrupt, Rout or Rally. See MORALE CHECKS on p.30 and DISRUPTION & ROUT on p.31.

DISRUPTION



A regiment or battery can become *Disrupted* whenever it takes casualties, and *automatically* becomes Disrupted whenever it is involved in a Melee. Disrupted status is indicated by a "D" icon in the Unit List. For more details see DISRUPTION & ROUT on p.31.

ROUT



A regiment or battery can become *Routed* whenever it takes casualties, loses a Melee, or another friendly unit in or adjacent to its hex Routs. Routed status is indicated by an "R" icon in the Unit List and by a unit icon containing one or more running figures. Various conditions can affect the chance that a unit will become Routed; see DISRUPTION & ROUT on p.31.

RALLY

At the beginning of each Player Turn, the program attempts to *Rally* (i.e., bring back to Good Order) each of that side's Disrupted/Routed units. The results are displayed in the Command Report dialog. For more details see 6.8 RALLY.

FATIGUE

Each regiment and battery has a *Fatigue* level ("FA" in the Unit List) of between "0" and "9". Fatigue can occur/increase due to combat. The higher a unit's Fatigue, the weaker it is in Melee and the more likely it will be to Rout when it suffers casualties. For more details see 4.4 THE UNIT LIST and 6.9 FATIGUE.



SUPPLY



Whenever a regiment makes a Ranged-Fire attack, the program checks to see if it has depleted its ammunition supply. (The initial probability is 1-in-24.) If it has, a "hollow bullet" (indicating no ammo) or "half-hollow bullet" (indicating low ammo) icon appears in its icon section in the Unit List. A regiment suffering from low/no ammo has certain restrictions placed on its Ranged-Fire capabilities, but can be resupplied by a friendly supply wagon; see 5.4 AMMO & SUPPLY WAGONS.

There is a separate ammo supply limit for artillery; see ARTILLERY AMMO on p.20.

TERRAIN

Terrain can affect movement, LOS and Ranged-Fire combat. Walls and breastworks can also affect Melee combat. These effects are listed in 6.1 TERRAIN, and in **Parameter Data** (which can be found by Selecting **Scenario Notes** in the **Help** menu).

STACKING



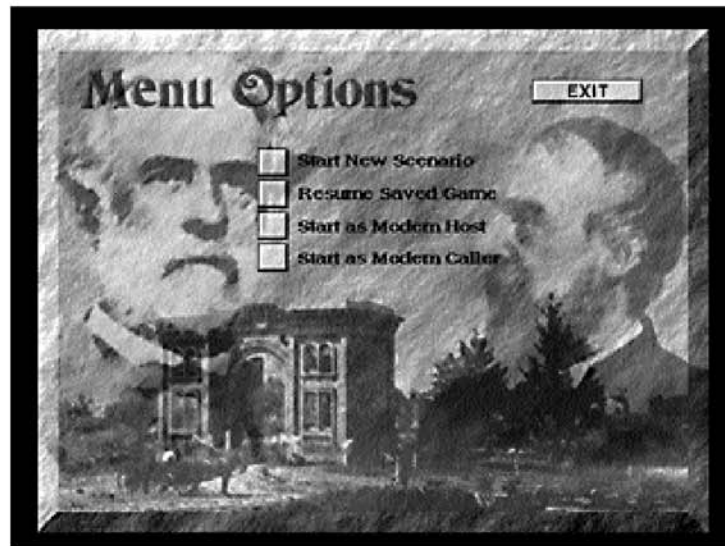
Stacking is limited to a total of four regiment, battery and/or supply wagon units per hex. There is also a stacking limit of ten strength factors

(displayed as "ST #" in the Unit List) of regiments and/or batteries per hex. In addition to these limits, up to four leaders per side may occupy the same hex. Stacking limits apply *per side* in Melee. Regardless of other stacking rules, only one supply wagon may occupy a hex.

You can move a unit from the bottom to the top of a stack in the Hot Spot hex by Selecting **To Top of Stack** in the **Units** menu. That menu also contains a **To Bottom of Stack** command. When using the 2D Normal View map (see p.14), you can place all leaders on the top of their stacks by Selecting **Leaders on Top** in the **Display** menu.



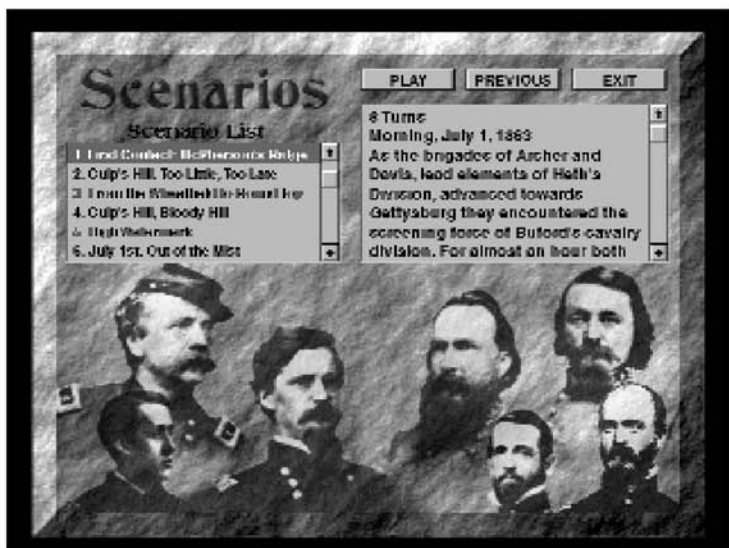
3.0 CHOOSING A SCENARIO



3.1 THE MENU SCREEN

When you launch *BATTLEGROUND: GETTYSBURG*, the Menu Screen appears after the introduction. This screen presents you with four choices:

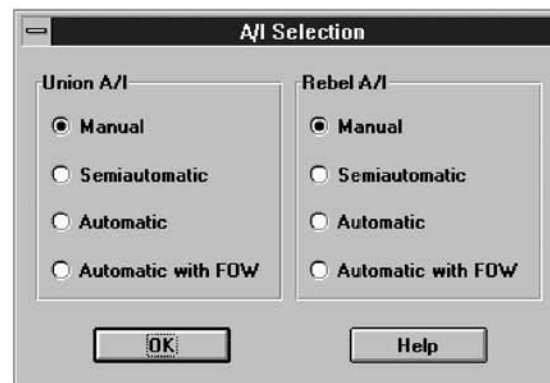
- **Start New Scenario:** Select this to proceed to the Scenario Selection Screen to start a new scenario.
- **Resume Saved Game:** Select this if you wish to resume playing a non-modem game you had saved and quit previously.
- **Start Game as Modem Host:** Select this to become (or resume being) the Host for a modem-play game.
- **Start Game as Modem Caller:** Select this to become (or resume being) the Caller for a modem-play game.



3.2 THE SCENARIO SELECTION SCREEN

This screen lets you pick a new scenario to play. First, Select the name of a scenario. Once you've decided on a scenario, make sure its name is highlighted, and Select the **Play** button. A dialog box will then appear, giving you the choice of what type of A/I you wish to use for each side. (For your choices, see 3.3 THE TYPES OF A/I.) When you Select **OK**, the scenario will begin.

The **Previous** button takes you back to the Menu Screen, and the **Exit** button takes you back to the Windows® Program Manager.



3.3 THE TYPES OF A/I

The type of A/I you choose will determine the amount of control the game's "Artificial Intelligence" exerts on play. When A/I is being used, the program will make some or all of the decisions for a particular side and automatically conduct all appropriate actions, such as firing and moving. The A/I can be used in four modes: *Manual*, *Semiautomatic*, *Automatic*, and *Automatic with Fog-of-War*. Any one mode can be applied to each side.

Manual equals "no A/I". Select this for a side if *you* want to make *all* the decisions for that side, including conducting all moves and attacks for it. This is the default mode for both sides.

If you Select **Semiautomatic** for a side, you'll be able to give *orders* (attack, defend, etc.) to the various *leaders* you choose to command on that side, while letting the program automatically handle all other actions for the side, such as moving and firing.

If you Select **Automatic** for a side, the *program* will handle *all* the decisions and actions for that side.

If you Select **Automatic with FOW** (Fog-of-War) for a side, the program will handle all the decisions and actions for that side, *and* Fog of War will be in effect. This mode is most appropriate when you want to control one side and have the program control the other.

To use the A/I during play, see 6.3 USING THE A/I.

3.4 RESUMING A SAVED GAME

To open a previously saved non-modem game, Select **Resume Saved Game** in the Menu Screen. A dialog box will appear, in which you must Select the saved-game file you want. Then Select **Open**.

For resuming a saved modem-play game, see 7.3.

If the game had been saved and quit during a phase that was controlled by the A/I, you may have to Select the **Activate A/I** menu command (or its corresponding Toolbox button) to restart it.

4.0 THE GAME INTERFACE



4.1 THE TITLE BAR

This appears at the very top of the screen, and displays the name of the scenario currently being played.

4.2 THE MENU BAR

This appears below the Title Bar, and displays the names of the various pop-down menus. These menus and their commands are explained below.

File

New...
Open...
Save
Save As...
Snapshot...
Exit

File Menu: Use this menu to load a previously saved game, or to save and/or exit a game.

Select **New** to start a new scenario. (Do *not* change directories in the dialog box that appears.) A new scenario has the extension *.scn*.

Select **Open** to resume a previously saved game. A previously saved game file has the extension *.btI*.

Select **Save** to save the game you are playing.

Select **Save As** to save a game under a file name other than the one currently being used for it.

Select **Snapshot** to save a copy of the portion of the map (including the position of all unhidden units) that is currently in memory as a bitmap (*.bmp*) file.

Select **Exit** to quit the scenario and return to the Menu Screen. If the current game has changed since the last time it was saved, a dialog will appear giving the option to save it before exiting.

Phase

Next (Ctrl-N)

Phase Menu: Use this menu when you want to proceed from one phase to the next.

Select **Next** to advance the game to the next phase.

Units
To T op of Stack
To B ottom of Stack
Turn C lockwise
Turn C ounterclockwise
A bout F ace
C hange F ormation
M ake B reastworks
R ecrew B attery
R emove From Map
A rtillery Dialog...
U ndo Last Movement (Ctrl-U)

Units Menu: Use this menu to change the state of friendly units, and to initiate artillery attacks. Most changes can occur only during the Movement Phase, and are subject to limitations as a result of the program rules and movement allowances.

Select **To Top Of Stack** to move a Selected unit to the top of its stack.

Select **To Bottom of Stack** to move a Selected unit to the bottom of its stack.

Select **Turn Clockwise** to

change the Facing of a Selected unit one hexside in a clockwise direction.

Select **Turn Counterclockwise** to change the Facing of a Selected unit one hexside in a counterclockwise direction.

Select **About Face** to change the Facing of a Selected unit 180°.

Select **Change Formation** to change the Formation of a Selected unit.

Select **Recrew Battery** to provide a new crew for an abandoned friendly artillery battery; see 5.3 ARTILLERY.

Select **Remove From Map** to voluntarily eliminate a unit. Removal can occur only during a friendly Movement Phase, and the unit must be in a map-edge hex. Select the unit, then the **Remove from Map** command. Removed units do not count towards victory conditions.

Select **Artillery Dialog** to make attacks with artillery units during the Offensive or Defensive Fire Phase.

Select **Undo Last Movement** to cancel the entire movement of the most-recently-moved friendly unit, so you can instead move it in a different way (or not at all). This command is disabled during modem play, and when Fog of War is in effect for the opposing side.

Melee
A dd to Melee
R esolve Melee
S how D ifferential

Melee Menu: Use this menu to conduct Melees.

Select **Add to Melee** (after right-clicking in a hex to mark it as a Melee hex) to designate the currently Selected unit(s) as participating in the Melee.

Select **Resolve Melee** *once* to resolve a Melee in the Hot Spot hex.

Select **Show Differential** to review the current Strength difference between the two sides in the Melee in the Hot Spot hex.

Reinforce
S cheduled
A rrived

Reinforce Menu: Use this menu to check on the availability of reinforcements.

Select **Scheduled** to display the reinforcements that are scheduled to arrive during the current scenario. If Fog of War is in effect for one or both sides, only the reinforcements for the side currently having its Player Turn will be displayed; otherwise, all reinforcements will appear.

Select **Arrived** during a friendly Movement Phase to display the reinforcements that are currently available to be placed on the map.

Status
S trength...
O bjectives...
V ictory...

Status Menu: Use this menu to display current strength, objective, and victory information.

Select **Strength** to see the current "manpower" strength of each regiment and higher organization. If Fog of War is in effect for a side, its strengths will appear only during its own Player

Turn.

Select **Objectives** to see the number, value and hex location of each Objective. Selecting any of the Objective-hex lines in the dialog box will put the Hot Spot in (and scroll the map to) that hex.

Select **Victory** to see the current level of victory and related items.

Display	
Units Off	
Unit Bases Off	
Leaders On Top	
Objectives	
Locations...	
Visible Hexes	
Full Screen Map	
Show Organization...	
Find Leader or Units...	
Jump Window...	
Fixed Units	
Spotted Units	
Low on or Out of Ammo, or Uncrewed	
Fired/Fought Units	
Moved Units	
Disrupted Units	
Organization	
2D Normal View	
2D Zoom-Out View	
3D Normal View	
✓ 3D Zoom-Out View	
Rotate Toolbox	

toggle (off or on) the display of Objectives on the map. When this command has a check mark next to it, each Objective hex will be marked with the flag of the side that controls it.

Select **Locations** to help you find a certain location on the map. When you Select one of those listed, the map will scroll to that hex and put the Hot Spot in it.

Select **Visible Hexes** to toggle (off or on) a display of which hexes are in the LOS of the current Hot Spot hex. An "X" in a hex indicates *no* LOS. When on, this command has a check mark next to it.

Select **Full Screen Map** to toggle (off or on) the Unit List and Ter-

Display Menu: Use this menu to control how information is displayed on the map.

Select **Units Off** to toggle (off or on) the on-map display of all units and markers. This option is provided so you can hide them in order to see the underlying map terrain better.

Select **Unit Bases Off** to toggle (off or on) the bases of the unit icons on the 3D (Battleview™) map.

Select **Leaders on Top** to control the on-map display of leaders on the 2D maps. When this command has a check mark next to it, leaders appear above all other units in their hex.

Select **Objectives** to

rain Info Box. When this command has a check mark next to it, these items are hidden. Units can still be Selected when the Unit List is hidden; see THE POP-UP SELECTION DIALOG on p.16.

Select **Show Organization** to see which units belong to which organizations. When you Select an organization name in the Organization Dialog, each of that organization's component units becomes highlighted on the map. If Fog of War is in effect for one or both sides, only the organizations for the side currently having its Player Turn will be displayed. An organization name printed in light gray indicates that all of its units are currently off-map (i.e., are reinforcements yet to arrive).

Select **Find Leader or Units** to display a dialog box that will let you find a specific unit or leader on the map. After Selecting this command, Select the white box labeled "Enter search", type in the name of the leader or unit (*being sure to spell and capitalize it the same way it appears in the game*); then Select **Search**. All occurrences of that name in the Order of Battle will appear in the larger white box. Select the one you're looking for, then Select **OK**.

Select **Jump Window** to display a miniature of the map. When you Select any spot in the miniature version, the game map will automatically scroll to the corresponding spot.

Select **Spotted Units** to toggle (off or on) a highlight around all units that have a LOS to (and thus are in the LOS of) at least one enemy unit.

Select **Low on or Out of Ammo, or Uncrewed** to toggle (off or on) a highlight around all units that are low on or out of ammunition and/or have no crew (the latter applies only to artillery batteries).

Select **Fired/Fought Units** to toggle (off or on) a highlight around all units that have either fired at an enemy unit or fought in a Melee during the current phase.

Select **Moved Units** to toggle (off or on) a highlight around all units that have moved during the current phase.

Select **Disrupted Units** to toggle (off or on) a highlight around all units that are Disrupted.

Select **Organization** to toggle (off or on) a highlight around all units that are part of the same organization as the first Selected unit, or are subordinate to the Selected leader, in the Unit List.

Note: The **Low on or Out of Ammo**, or **Uncrewed**, **Spotted**, **Fired/Fought**, **Moved**, **Disrupted**, and **Organization** menu options are mutually exclusive; i.e., Selecting any one of them will toggle-off any of the others that had been previously Selected. During the Melee Phase, each unit that is designated to engage in Melee becomes highlighted if no other highlight is currently Selected.

Select **2D Normal View** to change the map to its 2D version.

Select **2D Zoom-Out View** to change the map to a smaller, low resolution 2D version that enables more of it to be seen.

Select **3D Normal View** to change the map to its full-size 3D (Battleview™) mode.

Select **3D Zoom-Out View** to change the map to Battleview™ mode but with the hexes at half their normal size.

Select **Rotate Toolbox** to toggle the Toolbox between its vertical and horizontal orientation.

A/I
✓ Union (Manual)
Union (Semiautomatic)...
Union (Automatic)
Union (Automatic with Fog-of-War)
✓ Rebel (Manual)
Rebel (Semiautomatic)...
Rebel (Automatic)
Rebel (Automatic with Fog-of-War)
Activate A/I

A/I Menu: Use this menu to control the "Artificial Intelligence" capabilities of the program.

Select **[Manual]** (i.e., no A/I) for a side if you want to make *all* the decisions for that side, including conducting all moves and attacks for it. This is the default mode for both sides.

Select **[Semiautomatic]** for a side if you'd like to

choose certain *leaders* to command yourself (i.e., to give orders to), while letting the program automatically take care of all other decisions and actions for that side.

Select **[Automatic]** for a side if you want the *program* to handle *all* the decisions and actions for that side.

Select **[Automatic with Fog-of-War]** for a side if you want the program to handle all the decisions and actions, *and* have Fog of War in effect, for that side.

Select **Activate A/I** to restart the A/I after you have canceled it, or if you started the phase not using A/I but wish to activate it for the remainder of the phase.

Modem
Host
Caller
Null Modem
New Encryption Key
Resync with Remote
Communication Dialog...

Modem Menu: Use this menu to play a scenario with someone else over the telephone, using a modem at both ends, without having to exit back to the Menu Screen.

Select **Host** before you start a modem game if you wish to be in charge of opening and saving the scenario, and to configure your modem for play. The Host player

can also use this command to close the playing session.

Select **Caller** before starting a modem game if you wish to let the other player be responsible for opening and saving the scenario, and to configure your modem for play. As the Caller, you are responsible for specifying an encryption key (see 7.2). The Caller can also use this command to close the playing session.

Select **Null Modem** if you wish to play a game using a null-modem cable. See also 7.4 NULL-MODEM PLAY.

Select **New Encryption Key** in a modem game if you are the Caller and wish to specify a new encryption key. As the Caller you must ensure that the same encryption key is used when re-opening a saved-game file as was used when the file was saved previously. The extension *.btx* is used to denote an encrypted saved-game file. For more on encryption keys, see 7.2.

Select **Resync With Remote** in a modem game if the two sides get out of sync (e.g., due to a bad data transmission). Using this command re-transmits the entire scenario to the other player's computer. The Resync option should rarely be needed, as error checking is incorporated into the modem protocol used by the program. Before using it, check with the other player to ensure that he agrees a scenario resync is necessary. Alternatively, the Host can save the current scenario and open it again.

Select **Communication Dialog** in a modem game to display the "chat window" if you had closed it previously.

Options**Introduction**

- ✓ **B**eep on Error
- B**link Hot Spot
- S**mooth Scroll
- ✓ **S**ound Effects
- ✓ **V**ideo Effects
- ✓ **G**raphical Unit Icons
- L**eader Faces
- H**ex Outlines
- ✓ **3D** Dialogs
- ✓ **D**ialog **H**elp Buttons
- ✓ **A**uto Save

Options Menu: Use this menu to set the *default* for certain options associated with the main program. A check mark next to a command in this menu means that it is "on".

Select **Introduction** to toggle (off or on) the introductory material that plays when you launch the game.

Select **Beep on Error** to toggle (off or on) the option that causes a beep when you make an error.

Select **Blink Hot Spot** to toggle (off or on) the option that causes the Hot Spot to blink. [Exception: the Hot Spot never blinks on the 3D Normal View map.]

Select **Smooth Scroll** to toggle (off or on) the option that causes the map to scroll incrementally to a new Hot Spot. When this command has no check mark next to it, the map redraws directly at the new Hot Spot hex without scrolling through the intervening hexes.

Select **Sound Effects** to toggle (off or on) the playing of sound effects.

Select **Video Effects** to toggle (off or on) the playing of video clips.

Select **Graphical Unit Icons** to toggle the display of unit icons between graphical and NATO-type schematic versions.

Select **Leader Faces** (when using the 2D Normal View map with Graphical Unit Icons on) to toggle between a portrait-type and a graphical icon for each leader.

Select **Hex Outlines** to hide or display the map's hex outlines. When the hex outlines are visible, this command has a check mark next to it.

Select **3D Dialogs** to toggle the appearance of the program dialogs between an enhanced 3D version and the standard Windows® version.

Select **Dialog Help Buttons** to hide or display the Help buttons in the program dialogs.

Select **Auto Save** to have the program save the game automatically at the end of each phase [Exception: it will not save a phase

that was conducted under *Automatic A/I* (with or without Fog of War) control].

Help**General Help (F1)****Leader Handbook (F2)****Scenario Notes (F3)****About Battleground Gettysburg**

Help Menu: Use this menu to get information about how to use the *BATTLEGROUND: GETTYSBURG* program, about the battle being fought, and about the program itself.

Select **General Help** to open the *BATTLEGROUND: GETTYSBURG* General Help file.

Select **Leader Handbook** to view biographies of all the leaders in the game. If a leader is currently Selected, you will be taken directly to his "page" in the handbook.

Select **Scenario Notes** to find miscellaneous information on the two armies, their orders of battle, the data used internally in the game (such as the height of obstacles, the movement costs and defensive modifiers of the various terrain types), etc.

Select **About Battleground: Gettysburg** to display a dialog containing version and copyright information about *BATTLEGROUND: GETTYSBURG*.

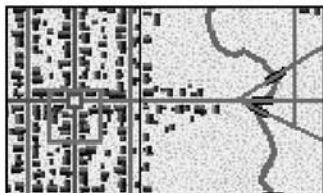




Jump Map (3D)



2D Zoom-Out



2D Normal View



3D Zoom-Out



3D Normal View

4.3 THE MAP

The map can be viewed in five different scales. The smallest playable size is the **2D Zoom-Out** map, which is displayed by Selecting **2D Zoom-Out View** in the **Display** menu. This is best used for a quick, overall view of things. Units on this map cannot be distinguished from each other as easily as on the other maps, but their positions relative to the opponent's units are readily apparent over a wider area.

The next scale is called the **2D Normal View**, and is displayed by Selecting **2D Normal View** in the **Display** menu (or, if the map is currently in the 2D Zoom-Out mode, by Selecting the "Zoom Map" button in the Toolbox). This presents the terrain in more detail than the 2D Zoom-Out map while showing a larger area than the 3D maps. You can choose to display units on the 2D Normal View map with either graphical icons or NATO symbols (see 5.0 THE UNIT TYPES).

The ultimate map view is the **3D Normal View** mode, which is displayed by Selecting **3D Normal View** in the **Display** menu (or, if the map is currently in the 3D Zoom-Out mode, by Selecting the "Zoom Map" button in the Toolbox). This presents the Battleview™—a high-resolution map in 3D-type isometric perspective, presenting much more detail on the screen. In this view, units are shown as "miniatures" with individual positions within their hex.

The **3D Zoom-Out** view displays the Battleview™ map at half of its normal size, thus allowing twice as much of it to be seen at a time. This is the default map when you start the game.

The fifth map view is the Jump Window (see SCROLLING below).

Scrolling

In most cases the map is too large to fit completely onto the screen, even in those scenarios where only a portion of the overall map is used. Therefore, several different ways to scroll it are provided. You can use the standard Windows™ scroll bars, the arrow keys on your keyboard, or the *Jump Window*.



To use the Jump Window, Select either its button in the Toolbox or the **Jump Window** command in the **Display** menu. This will display a miniature of the map being used (along with an indication of where each side's units are). Then Select the desired spot in the jump map, and the game map will automatically scroll to the corresponding point.

Place Names

Pressing the **Shift** key will display the names of various roads, farms and other geographical features.

Hex Coordinates

Each hex on the map has a unique set of coordinates, given in the form "#, #". The number on the left represents the vertical row of hexes (beginning with "0" for the leftmost row of hexes on the

map), while the number on the right represents the horizontal row (beginning with "0" for the topmost row). Thus, for example, the "G. J. White" farm near the upper-left-hand corner of the map has hex coordinates of "4, 9".

The coordinates of the Hot Spot hex are displayed at the far right of the Status Bar (see 4.6).



4.4 THE UNIT LIST

The Unit List is the portion of the screen display immediately below the map. It contains a representative drawing of each unit that occupies the current Hot Spot hex, plus that unit's name and pertinent game data. If the upper lefthand corner of a regiment's or battery's drawing contains a picture of a horse's head, that unit is cavalry or horse artillery respectively.

To Select a unit in the Unit List, left-click anywhere in its data area. To view the organizational information for a unit, *right-click* on its name in the Unit List and hold down the mouse button.



The Unit List can be hidden by Selecting either **Full Screen Map** in the **Display** menu or its equivalent Toolbox button.

The following explains the abbreviations and numbers displayed for *leaders* in the Unit List:

C (Command): The leader's Command Rating, given in the form "A" (best), "B", "C", "D", "E" or "F" (worst). This rating is used by the program to determine the leader's ability to stay "in command", thereby aiding the Rally of his *Disrupted* units. See **COMMAND RADIUS/RATING** on p.32.

An  icon "behind" the number when the Leader is Selected indicates that he is currently Detached.

L (Leadership): The leader's Leadership Rating, given in the form "A" (best), "B", "C", "D", "E" or "F" (worst). This rating is used by the program to let the leader aid in the Rally of a *Routed* unit he is stacked with; see 6.8 RALLY.

M (Movement): The leader's current Movement Allowance. This number will decrease as he moves or changes Formation.

An  icon "behind" the number when the Leader is Selected indicates that he is currently mounted.



A gold star appearing in the lower righthand corner of a leader's Unit-List portrait indicates that he has been "promoted" to the command of a higher organization due to the elimination of that organization's original leader.

The following explains the abbreviations and numbers displayed for *regiments* and *batteries* in the Unit List:

ST (Strength): The unit's current basic attack (and, if a regiment, defense) strength. This number is also used to determine stacking limits; see **STACKING** on p.7.

RG (Range): The maximum range at which the unit can make a Ranged-Fire attack. A unit with a range of "-" cannot attack in any way.

MV (Movement): The unit's current Movement Allowance. This number will decrease as the unit moves or changes Facing/Formation.

QL (Quality): The unit's Quality, given in the form "A" (best), "B", "C", "D", "E" or "F" (worst). This number does not change during play.

FA (Fatigue): The unit's current Fatigue level. "0"- "3" cause no adverse effect (these numbers appear in green). "4"- "6" represent Low Fatigue (and appear in orange). "7"- "9" are High Fatigue (and appear in dark red). See also 6.9 FATIGUE.

Unit-List Icons

One or more of the following icons will appear from time to time in the lower-center compartment of a regiment's or battery's data area. These icons, as they appear from left to right on the screen, represent the following:

 When the full-color bullet appears, the regiment is eligible to attack. Once it has attacked, the bullet turns brown. If the unit becomes low on ammo, the bullet will change to "half hollow" (i.e., half color and half outline). If the unit becomes out of ammo, the bullet will change to completely hollow (i.e., outline only).

 When the full-color cannonball appears, the battery is eligible to attack. Once it has attacked, the cannonball turns brown. If the battery is uncrowded (see 5.3 ARTILLERY), the cannonball is hollow (i.e., an outline).

R H The letter indicates the kind of weapon the unit is equipped with:

B: breech-loading rifles

C: carbines

H: 12-pounder howitzers

M: smoothbore muskets

N: 12-pounder Napoleon cannons

P: pistols

R: rifled muskets

S: Spencer repeating rifles

T: 10-pounder Parrott or 3-inch Rodman cannons

W: 12-pounder Whitworth cannons

 When the wheel appears, the unit is eligible to move. Once it begins to move, the wheel turns brown. When it has used all of its movement allowance, the wheel disappears.

 When the pick-and-shovel appears, the unit is constructing breastworks.

F When the "F" on a red background appears, the unit is Fixed, meaning that it cannot leave its hex. A unit's Fixed status is removed whenever its hex is attacked or the unit becomes Routed.

 This icon shows the unit's present Facing (as indicated by the direction the red arrow is pointing) and Formation. Depending on the unit in question, the two parallel yellow lines indicate that it is either in line, dismounted or unlimbered (as shown by

the icon illustration on the left) or in column, mounted or limbered (as shown by the illustration on the right).

D When the "D" appears, the unit is Disrupted.

R When the "R" appears, the unit is Routed.

 When the full-color binoculars appear, the unit is currently in the LOS of (and thus also has a LOS to) at least one enemy unit [Exception: if the *only* enemy unit having a LOS to the unit is an enemy supply wagon, the binoculars are brown, indicating that the identity of your unit is not known to the enemy if Fog of War is in effect].



The Pop-Up Selection Dialog

The Pop-Up Selection Dialog allows you to Select any unit(s) in the Hot Spot hex even if the Unit List is hidden. To display this dialog, simply *right-click* with the mouse in the Hot Spot hex. You can then Select a single unit by left-clicking on its name in the dialog, or Select multiple units by holding down the **Shift** or **Ctrl** key when you left-click. Double-clicking on a name is the same as pressing **Enter**, which is the same as Selecting **OK**. The information at the beginning of each regiment/battery name is that unit's ST# and weapon type.



The Terrain Info Box

The Terrain Info Box appears in the lower-left-hand corner of the screen, presenting certain information about the current Hot Spot hex. It displays a digitized photo (taken from actual sites around the battlefield) of the type of terrain in the hex (clear, orchard, forest, etc.), then lists that terrain type by name and gives its Ranged-Fire combat modifier, its elevation in feet, and its Objective value.

The bottom line of the Terrain Info Box shows the current *artillery* ammunition supply for each side (in the form "#/#", with the Union total on the left and the Confederate total on the right). See ARTILLERY AMMO on p.20.

Selecting a Unit

To Select a unit in the Unit List, left-click anywhere on its area in the List. You can quickly Select *all* the units shown in the Unit List by double-clicking with the left mouse button in the Hot Spot hex.

4.5 THE TOOLBOX

The Toolbox enables you to conduct certain actions without having to use the pop-down menus. Selecting a Toolbox button initiates the command associated with it. These commands are:

	Advance the game to the next phase.
	Change the screen display between the 2D Normal View and 2D Zoom Out, or 3D Normal View and 3D Zoom Out, mode.
	Change the Facing of the Selected unit(s) one hexside in a clockwise direction.
	Change the Facing of the Selected unit(s) one hexside in a counterclockwise direction.
	Change the Facing of the Selected unit(s) by 180°.
	Change the Formation of the Selected unit(s).
	Toggle (off or on) the on-map display of all units.
	Toggle (off or on) the bases of all unit icons on the 3D map.
	Make the Artillery Dialog appear.
	Resolve the Melee in the Hot Spot hex.
	Toggle (on or off) a highlight around all units that are suffering from low/no ammo or are uncrewed batteries.
	Toggle (on or off) a highlight around all units that have a LOS to (and thus are in the LOS of) at least one enemy unit.
	Toggle (on or off) a highlight around all units that have moved during the current phase.
	Toggle (on or off) a highlight around all units that have either fired at an enemy unit or fought in a Melee during the current phase.
	Toggle (on or off) a highlight around all units that are Disrupted.
	Toggle (on or off) a highlight around all units that are part of the same organization as the first Selected unit in the Unit List.
	Hide (or display) the Unit List and Terrain Info Box.
	Toggle (on or off) a display of which hexes are in the LOS of the current Hot Spot hex. An "X" in a hex indicates <i>no</i> LOS.
	Display (or hide) the flag of the controlling side in each Objective hex.
	Display the Jump Window. Select any spot on the jump map, and the game map will scroll to the corresponding spot.
	Cycle the Hot Spot to another unit that has yet to (be designated to) perform an action pertinent to the current phase.
	Activate the A/I (after you have halted it, or if you started the phase not using A/I but wish to activate it for the remainder of the phase).

4:00PM July 2 1863 Union Defensive Fire Phase (Day)

(34, 29)

4.6 THE STATUS BAR

The Status Bar (see illustration above) appears at the very bottom of the screen. Its main functions are to show the current time of day, the current phase, and the coordinates of the Hot Spot hex. It also displays various types of messages from time to time (e.g., to explain why the program won't let you perform a certain action). In addition, it gives a brief explanation of each menu command and Toolbox button when you place the cursor on that command or button and hold down the left mouse button.

4.7 SAVING A GAME

When you start a new scenario, you use the **Save** command in the **File** menu to save it. A dialog will appear so you can specify a name for the saved-game file. Normally you should use the extension *.btl*. Alternatively, you can Select **Auto Save** in the **Options** menu, in which case you'll be prompted at the end of each phase to save the game. Once you've saved the game this way, it will be saved again *automatically* by the Auto Save function at the end of each subsequent phase [Exception: it will not save a phase that was conducted under *Automatic* (with or without Fog of War) A/I control]. Should you wish to save the game at some other point in a phase, you can do so via the **Save** command.

To save the game under a file name different than the one currently being used for it, Select **Save As** in the **File** menu. This allows you to save the current state of a battle in another file without affecting the file being used for the battle.

4.8 SNAPSHOTS

The **Snapshot** command in the **File** menu enables you to save, as a bitmap (*.bmp*) file, a copy of the portion of the map (including the position of all unhidden units) that is currently in memory. A file-selection dialog will appear so you can specify the name of the file.

You can use the Paintbrush graphics program (supplied with Windows™) to open the file later. Refer to your Windows™ manual for instructions for the Paintbrush program. The Paintbrush program can also be used with your printer (black and white or color) to supply you with a printout of the map. Paintbrush will allow you to resize

the map (as desired) before printing.



5.0 THE UNIT TYPES

Infantry and cavalry regiments, artillery batteries, individual leaders and supply wagons are represented in the game. All, aside from unlimbered artillery, have an inherent movement capability; and all, aside from leaders, limbered artillery and supply wagons, can make attacks. (Infantry in column and mounted cavalry can only engage in Melee.) Most of their characteristics are covered in 2.0 THE BASICS OF PLAY, but more details on the special capabilities of leaders, artillery and supply wagons are given in 5.2-5.4 below. To see the attributes of a specific unit during play, Select its hex to put it in the Hot Spot and check its data in the Unit List.

5.1 UNIT ICONS

Many different icons are used to represent the units in the game. A complete listing is provided below.

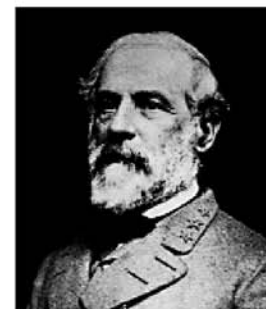
UNIT TYPES:

<i>Infantry regiment, in column</i>	<i>Infantry regiment, in line</i>
<i>Cavalry regiment, mounted</i>	<i>Cavalry regiment, dismounted</i>
<i>Artillery battery, limbered</i>	<i>Artillery battery, unlimbered</i>
<i>Leader, mounted</i>	<i>Leader, dismounted</i>
<i>Supply wagons</i>	

NATO-Icon Colors

The color of each NATO symbol indicates a general category of unit types, as explained here (note that these colors appear only on the 2D Normal View map):

Light Green: Infantry
Yellow: Cavalry
Red: Artillery
Gold (Star): Leader



5.2 LEADERS

For the basics, see LEADERS on p.6. One leader per side can aid in Melee (when stacked with a unit) by increasing his side's attack or defense strength by one. A leader lowers the chance that a unit will Rout by adding a -1 modifier to its Morale Check die roll, and can aid units under his command in their attempts to Rally. See also 4.4 THE UNIT LIST and 6.8 RALLY.

A dismounted leader is treated as infantry in column, and a mounted leader is treated as mounted cavalry, for movement-cost purposes.

A leader can be attacked as an individual target only if no other unit (aside from one or more other friendly leaders) is in his hex. Leaders do not become Disrupted or Routed.

A leader can be killed, wounded or captured. In each case he is eliminated and another leader is promoted at the start of the next friendly Player Turn to take over his command. (A leader so "promoted" has a gold star in the lower righthand corner of his portrait in the Unit List.) A mounted leader is twice as likely to be eliminated in this manner as one who is dismounted. A defending leader is automatically captured if all other friendly units in his Melee hex are eliminated.

Command & Leadership

Each leader has both a Command and a Leadership rating, which affect his ability to influence certain actions of other units under his command; see 4.4 THE UNIT LIST. In addition, *brigade* and *division* leaders have a Command Radius; see COMMAND RADIUS/RATING on p.32.



5.3 ARTILLERY

An artillery battery can have its "crew" killed in combat, leaving the guns abandoned and unusable. An uncrewed battery has a hollow (i.e., outline only) cannonball icon in the Unit List. To provide an uncrewed battery with a new crew, a friendly (to it) Good-order regiment that has not moved during the current Player Turn must be in the hex with it during a friendly Movement Phase, and both must be Selected; then Select **Recrew Battery** in the **Units** menu during that same phase. Note that only a cavalry regiment can recrew a horse-artillery battery.

When you Select **Recrew Battery**, the ST# of the recreding

unit is reduced by one (hence it must have an ST# of at least "2" or the recreding will not occur) and the battery's uncrewed status is removed. The battery's Fatigue level becomes the same as the recreding unit's. Neither unit can move (the recreding unit could advance into Melee), and the battery cannot fire, until the next friendly Player Turn.

For artillery ammo supply rules, see **ARTILLERY AMMO** below. For artillery in Melee, see **MELEE** on p.29 and **MELEE RESOLUTION** on p.29.

5.4 AMMO & SUPPLY WAGONS

When a regiment incurs a depletion of its ammo, it becomes "low on ammo" and thereafter cannot fire in its Offensive Fire Phase until resupplied. If a regiment that is already low on ammo incurs another ammo depletion, it "runs out of ammo" and can make no *Ranged-Fire* attack at all until it is resupplied.

Whenever a regiment suffering from low/no ammo starts a friendly Player Turn in a non-Routed state *and* in the same hex as (or within two hexes of) a friendly supply wagon, the program will resupply it. A resupplied unit is always returned to a "full" ammo state. The number of units resupplied is announced in the Command Report dialog.

Each time a supply wagon resupplies a regiment, that wagon's supply strength ("ST #" in the Unit List) is reduced by one. When its ST# becomes zero, it is eliminated. Wagons themselves cannot be resupplied.

A supply wagon that incurs a loss due to an attack does not have its ST# decreased, nor does it become Disrupted or Routed. Instead, its "crew" is considered killed and the wagon becomes immobile (i.e., its movement allowance becomes—and will remain—zero). An immobile supply wagon cannot be "recrewed", but can continue to resupply friendly regiments. A supply wagon captured in Melee becomes a supply wagon of the captor's side.

Artillery Ammo

The artillery ammo supply of both sides is displayed in the bottom line of the Terrain Info Box (see p.17). Each time an artillery battery makes a *Ranged-Fire* attack, its side's artillery ammo supply is reduced by one. In addition, each reduction of one in an artillery battery's ST# (including its capture in Melee) reduces its side's

artillery ammo supply by *three*. When a side's artillery ammo supply reaches zero, none of its artillery units can fire. A side's artillery ammo supply can never be increased. Neither captured artillery nor its ammo can be used by the captor side.



6.0 PLAYING A SCENARIO

6.1 TERRAIN

The **BATTLEGROUND**: *GETTYSBURG* maps contain numerous types of terrain, each with an associated effect on movement, LOS, and combat. If you wish to inspect the terrain in a hex obscured by the presence of units, Select that hex to put the Hot Spot there; then consult the Terrain Info Box, or Select the "toggle units" Toolbox button (or the **Units Off** command in the **Display** menu). If using the 3D map, you also have the option to Select the "toggle unit bases" Toolbox button or the **Unit Bases Off** command in the **Display** menu.

A table summarizing the effects of the various terrain types is presented on the next page. (The +/- number in the Combat Effect column alters the *attacker's* total strength by that amount; see

RANGED-FIRE RESOLUTION on p.28.) Terrain Combat Effects are cumulative for Ranged-Fire purposes, but the only Terrain Combat Effect that can apply to Melee is that for a wall or breastwork.

Breastworks



Breastworks can be constructed by infantry regiments and dismounted cavalry regiments during play. To start construction, during a friendly Movement Phase Select the unit and then Select **Make Breastworks** in the **Units** menu. To stop construction, follow the same procedure again during a friendly Movement Phase.

At the start of each Player Turn, the program checks to see if each friendly unit meets the construction qualifications, which are:

- The unit must be infantry or dismounted cavalry;
- It cannot have moved (including Facing/Formation change), attacked or been attacked in any way, or been in non-Good-Order status, at any time during the two preceding Player Turns.

If these conditions are met, the program makes a die roll based on an inherent probability and the unit's ST#. If the die roll is successful, a breastwork appears along the hexside the unit directly faces (unless one already exists there).

✂ A unit constructing breastworks has a "pick-and-shovel" icon in its area in the Unit List. While this icon is visible, the unit cannot recover from Fatigue, and if it fires it does so at half strength (and loses its "constructing" status).

Bridges, Creeks & Streams

The on-map bridges represent those that existed historically. All units can cross them; however, infantry in line and dismounted cavalry must change Formation to column or mounted respectively before it can cross a bridge over a *creek*. The extra movement cost to cross a *stream* is ignored if the unit crossing it qualifies for the road, pike, railroad or trail movement benefit.

Marsh Creek is the only *creek* on the map. Note that it is a darker blue than the streams, and can be crossed only at a bridge (or where the hexside art becomes stream art to allow units to ford it).

BATTLEGROUND: Gettysburg

TERRAIN CHART

Terrain Type	Movement Cost	LOS Effect	Combat Effect
Breastwork	1	none	-1 ^m
Bridge	0 ^a ; negates creek/stream	none	none ⁿ
Clear	2/3 ^q	none	none
Creek	impassable ^b	none	none ⁿ
Forest	4/6/8 ^c	obstacle ^e	-1
Hill	1/2 ^f	obstacle ^e	-1 ^g
Marsh	4/8/impassable ^c	none	none ^p
Orchard	3/4/6 ^c	obstacle ^e	none
Pike	1 ^{hk}	none	none
Rail Cut	impassable	obstacle ^e	+4 ^o
Railroad	2; negates forest ^k	none	none
Road	1/2 ^{hik}	none	none
Rough	4/8/impassable ^c	obstacle ^e	-2
Stream	1/2 ^l	none	none
Town	4/1/2 ^j	obstacle ^e	-1 ^p
Trail	2 ^{hk}	none	none
Wall	1/2/6 ^c	none	-2 ^{dm}

^a: Infantry in line and dismounted cavalry cannot use a bridge.

^b: Except via a bridge.

^c: Respective costs for infantry, dismounted cavalry, dismounted leader/mounted cavalry, mounted leader/limbered artillery, supply wagon.

^d: Applies to Ranged Fire only if the attacker's LOS crosses a wall hexside as it enters the target hex, but never applies during the Defensive Fire Phase if the target unit

entered the target hex during the preceding Movement Phase.

^e: Note that an obstacle may or may not block LOS, depending on the relative heights of the firer, obstacle and target. (The height of each obstacle type can be found by Selecting the **Help** menu, **Scenario Notes** and **Parameter Data**.)

^f: Respective *uphill* costs for infantry, dismounted cavalry, dismounted leader /mounted cavalry, mounted leader, limbered artillery, supply wagon. *Downhill* costs are half of the respective uphill cost (fractions rounded down).

^g: Applies only if attacking uphill. In Melee, a -1 applies *per level advanced uphill* into the Melee hex, based on the regiment ascending the most levels.

^h: Entering a hex across a pike, road or trail hexside negates the movement cost of the other terrain in the hex (aside from that of moving uphill/downhill, which can never be negated) only if *all* of the following apply: the moving unit is neither infantry in line nor dismounted cavalry; the moving unit is *not* moving as a stack with another unit (other than one or more leaders); and no other unit (other than one or more leaders) occupies the hex.

ⁱ: Respective costs for infantry in column, mounted cavalry, any leader/limbered artillery, supply wagon.

^j: Respective costs for infantry in line/infantry in column, dismounted leader, mounted cavalry, mounted leader/limbered artillery, supply wagon.

^k: Infantry in line and dismounted cavalry never receive pike, road, railroad or trail movement benefits.

^l: The stream cost is ignored if the unit crossing it can claim the benefit of moving along a road, pike, railroad or trail.

^m: The wall/breastwork modifier applies during Melee if an attacker advanced across a hexside of this type. If both types were advanced across, only the wall modifier applies.

ⁿ: Advancing across a creek hexside into Melee is allowed only via a bridge.

^o: Applies only if the attacker is firing *down* into an adjacent hex across a Rail Cut hexside.

^p: Infantry in line, and dismounted cavalry, automatically Disrupt when they enter a town or marsh hex.

^q: Cost is "2" for all units except supply wagons, which must pay "3".

6.2 VICTORY CONDITIONS

Each scenario has its own set of Victory Values, which are point values that determine victory. They can be viewed via the **Victory** command in the **Status** menu. Using this command causes the Victory Dialog to appear, which lists a variety of data. It shows the number of units each side has lost so far and their point value. It also names the side the victory conditions apply to (calling it the *First Side*), the total point value of all Objective hexes that side currently controls, and that side's current overall point total (which the program calculates by subtracting the value of its unit losses from the sum total of its controlled Objectives plus the enemy's losses).

Any of five levels of victory are possible for the First Side: *Major Defeat*, *Minor Defeat*, *Draw*, *Minor Victory* and *Major Victory*. Each has an associated number of points which that side must equal or exceed at the end of play in order to achieve the next-higher level of victory. Specifically:

- The First Side suffers a **Major Defeat** if its point total is less than or equal to the total listed for "Major Defeat" in the Victory Dialog.
- The First Side suffers a **Minor Defeat** if its point total is greater than the total listed for "Major Defeat", but is less than or equal to the total listed for "Minor Defeat", in the Victory Dialog.

- The First Side achieves a **Draw** if its point total is greater than the total listed for "Minor Defeat", but is also less than the total listed for "Minor Victory", in the Victory Dialog.
- The First Side wins a **Minor Victory** if its point total is greater than or equal to the total listed for "Minor Victory", but is less than the total listed for "Major Victory", in the Victory Dialog.
- The First Side wins a **Major Victory** if its point total is greater than or equal to the total listed for "Major Victory" in the Victory Dialog.

Victory Dialog			
First Side	Rebel	Objective Points	25
Union Losses			
Infantry Losses	2600	Infantry Point Loss	260
Cavalry Losses	1200	Cavalry Point Loss	360
Artillery Losses	1	Artillery Point Loss	20
Rebel Losses			
Infantry Losses	2200	Infantry Point Loss	220
Cavalry Losses	0	Cavalry Point Loss	0
Artillery Losses	0	Artillery Point Loss	0
Victory Values			
Major Defeat	0	Minor Defeat	200
Minor Victory	400	Major Victory	600
Total Points	445	Outcome	Rebel Minor Victory
OK		Help	

The program takes the First Side's current overall point total, finds which level that total equates to, and displays that level's name as the side's current level of victory.

A scenario does not automatically end when one side achieves a Major Victory (or suffers a Major Defeat); the level of victory may change during the course of play as casualties occur and Objectives change hands. Only the level that exists at the end of the scenario applies for determining the winner.



Objectives

As the name implies, an Objective is a vital hex to control in a scenario due to its victory-point value. All Objectives are controlled by one side or the other at scenario start. To gain control of an enemy-controlled Objective, you must occupy it with one of your own units (even a Disrupted one will suffice).



To display all Objectives on the map, Select **Objectives** in the **Display** menu. When this command has a check mark next to it, each Objective hex is marked with a flag icon to denote its location and ownership.

To find the point value of a specific Objective hex, Select **Objectives** in the **Status** menu. Selecting one of the Objective-hex lines in the dialog box that appears will move the Hot Spot to that Objective hex.

6.3 USING THE A/I

When the A/I is conducting an action, the A/I Action Dialog appears in order to tell you what the A/I is doing, and the map will scroll to bring the corresponding portion of the map to the center of the display.



The A/I Action Dialog has four buttons: *Step*, *Run/Pause*, *Cancel* and *Help*. The *Step* button is initially the default. The current default button is outlined in black, meaning that it can be chosen by pressing **Enter** while the dialog is on-screen.

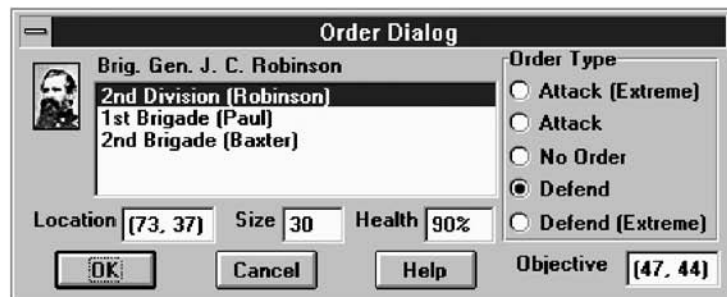
The **Step** button runs the A/I for one action, after which A/I processing halts.

The **Run** button makes the A/I run continuously until there are no more A/I actions for the current phase. When you Select **Run**, it changes to **Pause** (which becomes the default).

The *Pause* button halts the A/I temporarily. (While the game is thus halted, you cannot Select anything from the Menu Bar or Unit List—but the Toolbox and other A/I Dialog buttons remain active.) When you Select **Pause**, it changes back to **Run** (which becomes the default).

The **Cancel** button cancels A/I processing. (When you Select **Cancel**, it becomes the default.) To re-activate the A/I, Select the "Activate A/I" button in the Toolbox or the **Activate A/I** command in the A/I menu. While the A/I is activated and the A/I Action Dialog is on-screen, the **Esc** (Escape) key acts as a **Cancel** button.

Note: When the A/I for the side conducting the actions in the current phase is set to Manual, you can Select the **Activate A/I** menu command (or its corresponding Toolbox button) at any time to have the A/I complete that phase for you. Also, the type of A/I being used (Semiautomatic, Automatic, or Automatic with Fog-of-War) can be changed via the A/I menu at any time for either or both sides [Exception: if playing a modem-to-modem game, Fog of War cannot be turned off once the game has begun].



Semiautomatic A/I & Organizations

Selecting the **Semiautomatic** command in the A/I menu at the start of the scenario lets you issue your own orders to one or more *leaders* (and thus to the units under their command). If you choose this, the Leader Selection Dialog will appear, from which you must Select the leader(s) you wish to control. (To choose more than one, hold down the **Ctrl** or **Alt** key as you Select each name.)

Afterwards, an Order Dialog for each of your leaders will appear at the start of his friendly Player Turn. This dialog shows the order his superior has issued to him (unless he is the army leader)—which you can change if you wish—and allows you to issue orders to his subordinate leaders (and thus to their regiments and/or batteries). "Location" shows the coordinates of the hex the named leader presently occupies. "Size" indicates the highlighted organization's current strength. "Health" indicates the percentage of units in that organization that are in Good Order, crewed if artillery, and not suffering from High Fatigue.

To give an organization an order, Select its name and then Select one of the orders from the list in the dialog. Then choose the organization's "objective" for the turn by *right-clicking* on the appropriate hex. Once you've given orders to all your organizations, Select the **OK** button and play will proceed.

Whenever you click the **Cancel** button in the Order Dialog, A/I processing is canceled at that point. Processing can be resumed by Selecting the "Activate A/I" button in the Toolbox or the **Activate A/I** command in the **A/I** menu.

Unknown-Unit Markers



When Fog of War is in effect for a side, its units are partially revealed—in the form of Unknown-Unit markers—whenever an enemy unit becomes adjacent to them. An Unknown-Unit marker indicates only the presence of a hidden unit; the actual type(s) and number of units are not revealed until the start of the next phase. A unit's move automatically ends when it reveals an adjacent Unknown-Unit marker.

6.4 GAME TURNS

Each scenario has a maximum number of playable Game Turns. When that number has been played to completion, the game is over. The number of Game Turns is displayed in the Phase Box (see p.3).

6.5 THE SEQUENCE OF PLAY

Each Game Turn comprises two Player Turns—one Rebel and one Union. (The Rebel side goes first in each Game Turn.). Furthermore, each Player Turn is made up of four phases, which occur in the following order: *Movement Phase*, *Defensive Fire Phase*, *Offensive Fire Phase*, and *Melee Phase*. For simplicity, the player whose side is "active" in each of these phases (aside from the Defensive Fire Phase) is referred to as the *Phasing Player*. Except in the last Player Turn of the game, the completion of each Melee Phase is followed by the Movement Phase of the next Player Turn, in which the opponent becomes the Phasing Player. To advance the game to the next phase, Select either the "advance to next phase" Toolbox button or the **Next** command in the **Phase** menu.

In the **Movement Phase**, the Phasing Player may move some, all or none of his units that are capable of movement. However, as

the first action of this phase, the program finds all of the Phasing Player's units that are Fatigued, Disrupted, Routed, low on ammo and/or out of ammo, and checks to see if each loses any Fatigue, is resupplied and/or Rallied [Exception: Rally attempts do not occur in night turns]. The program also checks to see if any units can build breastworks, and constructs them if there are. It then announces on-screen, in the form of the "Combat Report", the results of these checks.

In the **Defensive Fire Phase**, the Phasing Player's *opponent* may fire some, all or none of his units that are capable of making a Ranged-Fire attack.

In the **Offensive Fire Phase**, the Phasing Player may fire some, all or none of his units that are capable of making a Ranged-Fire attack.

In the **Melee Phase**, the Phasing Player may conduct Melees with some, all or none of his Melee-capable units that are adjacent to an enemy unit.

6.6 MOVEMENT

The Phasing Player can move his units only during their Movement Phase, at which time he may move all, some or none of them that are *capable* of movement (e.g., unlimbered artillery cannot move from one hex to another, nor can an uncrewed supply wagon). For a basic explanation of how to use the mouse to move units, see MOVEMENT on p.4.

If more than one unit in a hex is currently Selected, you can move all of them using any movement method just as if they were a single unit (within stacking limitations; see STACKING on p.7). Note, however, that moving any *stack* of units, or entering a hex that contains *even one* other unit, negates the benefits of moving along a road, pike, railroad or trail. Hence if you try to move two or more units simultaneously along a road, they must pay the non-road cost of the hex they are entering. Likewise, if a unit already occupies a road hex and you attempt to move another unit into it, the non-road cost will be charged. Leaders do not count as units for the purposes of these road, pike, etc., movement limitations.

Each Formation change a unit makes, and each Facing change made by infantry in line or dismounted cavalry, costs it a portion of its movement allowance; these costs are listed under Change

Costs in **Parameter Data**, which can be found by Selecting **Scenario Notes** in the **Help** menu.

If you move a unit but want to start its move over again, you can Select **Undo Last Movement** in the **Units** menu or hold down the **Ctrl** key and press **U** on the keyboard, provided that unit is *still* Selected [Exception: A move cannot be undone if Fog of War is in effect for the opposing side].

If you move a unit but use only part of its movement allowance, you can move one or more other units and still go back and finish moving the first unit. A unit can become the "leading" unit in column movement even if it has already expended part of its movement allowance.

A unit's movement allowance drops to "0" whenever it moves adjacent an Unknown-Unit marker, or moves adjacent to a non-Routed enemy unit *and* is within that unit's Field of Fire.

All the various types of terrain in the game have an associated movement cost, or provide some kind of benefit or restriction to movement. See 6.1 TERRAIN for details.

Reinforcements

Many of the scenarios have reinforcements, which are units that enter from off-map during play. You can display the Schedule Dialog to see when, where and how many reinforcements are available by Selecting **Scheduled** in the **Reinforce** menu. (However, you cannot see the opponent's reinforcements if Fog of War is in effect for his side.) Selecting any line in this dialog automatically scrolls the map to the arrival hex of that reinforcement unit and makes that hex the current Hot Spot.

At the start of a Movement Phase in which reinforcements are due to arrive, a message to that effect will appear on the screen. The arriving units may be brought onto the map at any time during the Movement Phase, or they may be ignored and brought on in a subsequent Movement Phase (i.e., they will remain available indefinitely until entered).

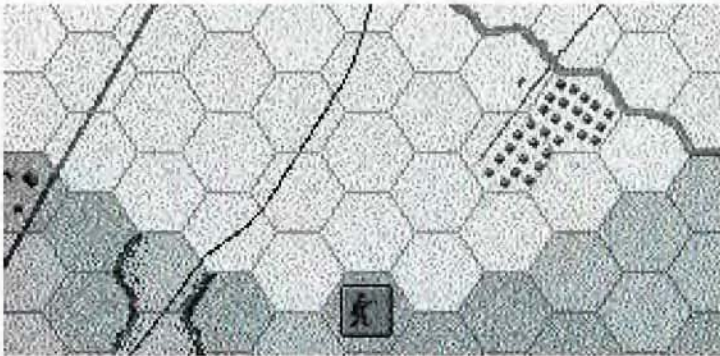
To bring on reinforcements, Select **Arrived** in the **Reinforce** menu to display the Arrived Dialog, which will show a list of the available units. Double-click with the left mouse button on the name of a unit in the list. When you do so, the dialog will disappear, the map will scroll to the entry hex and that unit will appear there. If more reinforcements are available, Select **Arrived** again, and

repeat the procedure until you're done bringing on your reinforcements.



6.7 COMBAT

For the basics, see COMBAT on p.5. A supply wagon cannot attack; its ST# is used only to show how many units it can resupply (see 5.4 AMMO & SUPPLY WAGONS). The same unit can be attacked more than once in the same phase [Exception: not in the Melee Phase]. However, a unit may make a Ranged- Fire attack or advance into Melee only vs. a target that lies within that attacker's *Field of Fire*:



The light gray shading in the illustrations show the unit's (an infantry regiment in line) current Field of Fire. It cannot attack (even to advance into a Melee) any enemy unit that lies outside this Field of Fire unless it first makes an appropriate Facing change during its Movement Phase. A Ranged-Fire attack made vs the unit from any hex outside of its Field of Fire is called an Enfilade, and would receive a +2 to its attack strength.

Ranged Fire

Ranged Fire uses a combination of the firer's ST#, weapon type (as denoted by its "letter in a brown circle" icon in the Unit List; see 4.4), and the hex range to the target to determine the actual strength of the attack. All Disrupted units have their strength factor halved prior to any other modification. Infantry in line, mounted cavalry, Routed units, and those that are out of ammunition and/or have no valid

target within their Field of Fire cannot use Ranged Fire.

For a basic explanation of how to use the mouse to conduct Ranged Fire, see **RANGED FIRE** on p.5.



LOS and terrain can affect the attack. Ranged Fire cannot be used vs. a target the firer has no LOS to. Selecting either the "show LOS" Toolbox button or the **Spotted Units** command in the **Display** menu will highlight all units that have a LOS to at least one enemy unit.

No unit may conduct more than one Ranged-Fire attack per friendly fire phase. Selecting either the "highlight fired units" Toolbox button or the **Fired/Fought** command in the **Display** menu will highlight all units on the map that have attacked thus far in the current phase.

Ranged Fire can be conducted vs. only one target unit at a time. If the target hex contains only one unit, or several units all of

the same type, the attack will be resolved automatically. (In the latter case the program chooses the unit to be affected.) If the target hex contains more than one type of potential target, a Target Dialog will be displayed to let you Select one of those units as the target. A unit name appearing in gray in the Target Dialog indicates the unit is suffering from low/no ammo.

An easy way to fire *artillery* is via the "display Artillery Dialog" Toolbox button (or the **Artillery Dialog** command in the **Units** menu). Selecting either of these makes the Artillery Dialog appear, which lists all friendly artillery units that are capable of firing. To fire a unit using the Artillery Dialog, first Select the unit's name in the list, then right-click on the target hex. (Note that when a unit in the Artillery Dialog is Selected, all of its potential targets are highlighted on the map.) Once the unit fires, it disappears from the list and the next unit is automatically Selected, so all you have to do to fire this next unit is to right-click again on a target hex. A unit name printed in light gray in the dialog means that particular unit currently has no eligible target.



Ranged-Fire Resolution

When a unit makes a Ranged-Fire attack, the program multiplies the firer's ST# by a number derived from the firer's weapon type and the range to the target, then makes a die roll which is modified according to the following conditions (as applicable):

- x As per the defender's terrain modifier
- +2 If the defender is infantry in column and/or is being Enfiladed

+4 If the defender is mounted cavalry

The program uses the modified die roll to determine the amount of casualties (ST losses) inflicted on the defender, and adjusts the latter's ST# accordingly. (See the Weapon Effectiveness Table and the Fire Results Table in **Parameter Data** under **Scenario Notes** in the **Help** menu.) Each attack is resolved before the next one is made.

The possible results of Ranged-Fire depend on the type of target unit:

Regiment: no effect; or a one-level increase in Fatigue; or a reduction in its ST# (if reduced to "0", the unit is eliminated; see also **MORALE CHECKS** on p.30).

Battery: no effect; or a one-level increase in Fatigue; or a reduction in its ST# (if reduced to "0", the unit is eliminated; see also **MORALE CHECKS** on p.30); or the destruction of the battery's "crew" (which leaves the guns abandoned).

Leader: no effect; or a Wound/elimination. (See 5.2 **LEADERS**.)

Supply Wagon: no effect; or the destruction of the wagon's "crew" (see 5.4 **AMMO & SUPPLY WAGONS**).





Melee

For the basics, see MELEE on p.5. An artillery battery has a basic strength of "1" when defending in Melee. A leader stacked with a unit under his command increases the strength of his side by *one* in Melee, but any additional friendly leader present in the Melee provides no further benefit. A leader can advance into Melee only if accompanying a friendly regiment. Units cannot advance into Melee in excess of stacking limits, nor if they are Disrupted/Routed.

To initiate a Melee, first choose—using the *right* mouse button—an enemy-occupied hex adjacent to the unit(s) that will conduct the Melee. Then Select each friendly unit (or stack of units) that will participate in the Melee and Select **Add to Melee** in the **Melee** menu. (Selecting **Show Differential** in that menu will display the attacker's current strength advantage ["+#"] or disadvantage

["-#"] in the Melee.) Once you've added the desired attacking unit(s) to the Melee, resolve it by Selecting the "resolve Melee" Toolbox button or the **Resolve Melee** command in the **Melee** menu. A dialog will be displayed to give the results (see MELEE RESOLUTION below). Each Melee must be resolved before the next one can be initiated. Lone leaders cannot Melee each other.

Semi-Auto Melee

You can also use "drag-and-drop" to conduct Melees; see MELEE on p.5.

Auto-Melee

You can have the program conduct Melee for you even if not using the A/I. To do this, hold down the **Alt** key and right-click on an enemy-occupied hex adjacent to at least one friendly, Melee-eligible unit. The program will find all units eligible to attack that hex, and will give their names, their locations and the attack differential. If you click **OK**, they will automatically attack the hex.

A/I Melee

Another option for conducting Melee is simply to Select the "activate A/I" Toolbox button. The program will then conduct all Melees in that phase automatically.

Melee Resolution

Even though the advancing side is termed the attacker, both sides engage in Melee simultaneously; hence the attacker can also suffer casualties. To resolve a Melee, the program:

- Adds one to the attacker's total strength if no attacking unit in the Melee fired during the Offensive Fire Phase;
- Subtracts from the attacker's total strength any terrain modifier incurred in advancing into the hex across a wall or breastwork hexside;
- Subtracts from the attacker's total strength a number equal to the greatest number of elevation levels *ascended* by any one regiment as it advanced into the Melee;
- Subtracts one from the attacker's total strength if any attacking unit is suffering from Low Fatigue, or two if any suffers from High Fatigue;
- Halves the strength of each Disrupted/Routed defender in the Melee hex.

- Increases each side's strength by one if at least one friendly leader is present in the hex (provided a friendly regiment or battery is also present); and lastly,
- Subtracts the defender's total strength from the attacker's total strength.

The program then makes a die roll, and cross-indexes it on the Melee Table with the difference between the two sides' total strength to determine the losses each side will suffer. A negative-number result in the Melee Table for a side indicates that it is the "loser" in the Melee. (You can view the Melee Table by Selecting the **Help** menu, **Scenario Notes** and then **Parameter Data**.)



Melee—unlike Ranged Fire—can affect all units in the hex. *In-hex* terrain modifiers (forest, orchard, etc.) do not apply in Melee.

All regiments and batteries (of both sides) participating in a Melee automatically become Disrupted and have their Fatigue level increased by three. If the defending side loses a Melee, its survivors are automatically retreated one hex by the program (and will have to undergo a Morale Check; see **MORALE CHECKS** below). If a unit must retreat but has no legal hex to retreat to, is an unlimbered battery or its inherent movement allowance is "0", it is eliminated instead. If a regiment advances into a hex containing only

one or more enemy leaders, supply wagons and/or uncrewed batteries, it captures them automatically. (Captured leaders and batteries are eliminated; supply wagons are taken over by their captor.)

If all defending units are eliminated or forced to retreat, the attacking unit(s) automatically occupy the Melee hex.

Morale Checks

Whenever a defending regiment or battery suffers casualties (i.e., has its ST# reduced) due to combat but is not eliminated or have its crew killed, the program rolls a six-sided die to make a Morale Check for it. If the casualties were incurred during the Defensive Fire Phase, the Morale Check occurs at the end of that phase. If the casualties were incurred during the Offensive Fire or Melee Phase, the Morale Check occurs at the start of the next Player Turn.

In addition, each time a regiment or battery becomes Routed, every friendly regiment and battery in its hex and those adjacent to it must take a Morale Check.

The following cumulative modifiers can apply to the Morale Check die roll:

- 1 If the unit is stacked with any friendly leader
- +1 If the unit is suffering from low/no ammo
- +1 If the unit was already Disrupted
- +1 If the unit was already suffering from Low Fatigue
- +2 If the unit was already suffering from High Fatigue
- +2 If the unit was fired on Enfilade
- +2 If it is a night turn
- +6 If the unit was already Routed

The possible results of a Morale Check depend on when the combat that caused it occurred in the Defensive Fire Phase, the Offensive Fire Phase or the Melee Phase (the results of Morale Checks made at the start of a Player Turn are displayed in the Command Report dialog):

Defensive Fire Phase: If the modified die roll is less than or equal to the unit's Quality, it "passes" the Morale Check and there is no

effect. If the die roll is greater than its Quality, it “fails” it and becomes Disrupted.

Offensive Fire Phase: If the modified die roll is less than or equal to the unit's Quality, it “passes” the Morale Check and becomes Disrupted. If the die roll is greater than its Quality, it “fails” it and becomes Routed.

Melee Phase: If the modified die roll is less than or equal to the unit's Quality, it “passes” the Morale Check and there is no effect (though the unit is automatically Disrupted anyway, due to having engaged in Melee; see p.30). If the die roll is greater than its Quality, it “fails” it and becomes Routed.

Disruption & Rout

For the basics, see DISRUPTION and ROUT on p.6.

When a unit becomes *Disrupted*, a “D” icon appears in its area of the Unit List. A Disrupted unit has its attack strength and movement allowance halved, and receives a +1 die roll modifier for Morale Check purposes.

When a unit becomes *Routed*, an “R” icon appears in its area of the Unit List, it cannot attack, it defends at half strength in Melee, and it receives a +6 die roll modifier for Morale Check purposes. Infantry in line change to column Formation, and dismounted cavalry change to mounted, when they Rout. Mounted cavalry and limbered artillery do not change Formation when they Rout, but their icon still changes to the standard “running-man” icon to make them stand out better on the map. A Routed unit cannot move closer to the closest (to it) unhidden enemy unit that is in the LOS of any friendly unit (and so cannot advance into Melee).

Leaders and supply wagons neither Disrupt nor Rout. A Routed unit cannot become Disrupted (except when it Rallies; see 6.8), and loses any Disrupted status it might have had. If a Routed unit suffers another Routed result, it loses one or more strength factors (as determined by a die roll made by the program); such units are termed “lost stragglers” in the Command Report that appears at the start of the next Player Turn.



6.8 RALLY

For the basics, see RALLY on p.6. In a Rally attempt, the program makes a six-sided die roll for each of the Phasing Player's friendly Disrupted/Routed units [Exception: Rally attempts are not made for Routed units during night turns].

A *Routed* unit's Quality is considered to be “0” for Rally purposes, and therefore it cannot Rally on its own. However, if it is stacked with a leader, his Leadership Rating is used for the Rally attempt *if* he is in the same organization as (or in a higher one than) the unit being Rallied. The possible results of a Rally die roll are:

- If a *Routed* unit's die roll is less than or equal to the applicable Leadership Rating, it Rallies (i.e., loses its Routed status *and becomes Disrupted*—but cannot be returned to Good Order in the same turn).

- If a *Disrupted* unit's die roll is less than or equal to the applicable Command Rating, it Rallies (i.e., loses its Disrupted status *and returns to Good Order*). Each Disrupted unit has a nominal Command Rating of "1" for Rally purposes. If it is not Detached *and* its brigade leader is "in command", its Rally die roll will be successful if less than or equal to "1 *plus* the applicable Command Rating modifier". If its brigade leader is "not in command", it will Rally only on a die roll of "1". See COMMAND RADIUS/RATING below for further clarification.



Command Radius/Rating

The Command Radius of a *brigade* leader is the maximum distance in hexes he can be from one of his regiments and still be able to provide it with a Command Rating modifier. This distance is *two* hexes for Union, and *three* hexes for Confederate, brigade leaders.

The Command Radius of a *division* leader is the maximum distance in hexes he can be from one of his brigade leaders and still be able to pass a Command Rating modifier to the latter. This distance is *four* hexes for Union, and *six* hexes for Confederate, division leaders.

Any unit (including brigade or division leader) outside the pertinent Command Radius of its/his superior officer is Detached, meaning that it/he can neither receive nor pass down a Command Rating modifier.

At the beginning of each Player Turn, the program determines each friendly leader's Command State (i.e., whether he is "in command" or "out of command"). Starting with the highest (the army) leader, a six-sided die roll is made. If the die roll is less than or equal to his Command Rating (his "C#" in the Unit List), he is "in command". If he is found to be "in command", he automatically passes down to each of his corps commanders a -1 Command Rating modifier to *their* Command State die roll. Each corps commander found to be "in command" passes down a -2 Command Rating modifier for the die roll of each of his division commanders (because each time a subordinate is found to be "in command", the Command Rating modifier he passes down to *his* subordinates increases by one). Each division leader found to be "in command" will in turn pass down a -3 Command Rating modifier to each of *his* non-Detached brigade leaders. Each brigade leader who is found to be "in command" will pass down a -4 Command Rating modifier to the Rally die roll of each of *his* Disrupted but non-Detached brigades. Whenever a leader is found to be "out of command" (or is Detached), the modifier *he* passes down becomes "0". [For example, if a division leader is Detached, his brigade leaders will be able to pass down only a -1 (i.e., their own) Command Rating modifier to each of their non-Detached, Disrupted brigades—meaning that each such brigade will Rally only on a modified die roll of less than or equal to "2". Note that if the side's army and pertinent corps, division and brigade leaders are all "in command", the brigades will rally automatically in a daytime turn.]

Many (including all of the Union) artillery batteries are corps-level units, which means they can gain a Command Rating modifier only from their corps and army leader.

All Command Ratings are treated as being one lower than normal in a night turn.

6.9 FATIGUE

For the basics, see **FATIGUE** on p.6. Fatigue has an adverse effect on a unit's strength in **Melee** (see **MELEE RESOLUTION** on p.29) and on its ability to avoid **Routing** when it takes a **Morale Check** (see **MORALE CHECKS** on p.30).

Fatigue occurs in a regiment or battery in the following ways:

- If it suffers a Fatigue result ("F" result in the Fire Results Table) when attacked by Ranged Fire, its Fatigue is increased by *one* (this can apply only once per phase);
- If it suffers casualties, its Fatigue is increased by *one* (this can apply only once per phase);
- If it engages in **Melee**, its Fatigue is increased by *one*, or by *two* if it loses the **Melee**.

A unit whose Fatigue level ("FA" in the Unit List) is 0-3 suffers no adverse effects. A unit suffering from **Low Fatigue** ("FA" of 4-6) receives a +1 die roll modifier to each **Morale Check** it takes. One suffering from **High Fatigue** ("FA" of 7-9) receives a +2 modifier to its **Morale Checks**. In addition, if one or more attacking units in a **Melee** suffer from Fatigue, that attack's total strength is reduced by one if **Low Fatigue** applies, or by two if **High Fatigue** (or any combination of **Low** and **High** for different attackers) applies.

At the beginning of each friendly Player Turn, each **Fatigued** unit has a probability (5% if a day turn; 20% if a night turn) of reducing its Fatigue by one *if* in the two preceding Player Turns it has not moved (including a **Facing/Formation** change), fired, suffered any increase to its Fatigue, or engaged in constructing breastworks.



7.0 MODEM PLAY

Modem play allows two people to play the opposing sides in a **BATTLEGROUND: GETTYSBURG** scenario without having to be together in the same place. All each player needs is an installed copy of the game, and a modem hooked up to his computer and phone line.

7.1 STARTING A NEW MODEM-PLAY SCENARIO

To start a new scenario and play it by modem, first call your opponent on the phone, pick a scenario to play, and agree on who will be the **Caller** and who will be the **Host**. The **Host** will be responsible for opening and saving the scenario on his computer. The **Caller** will provide an encryption key at the start of the scenario to ensure that, when the scenario is saved, no one but the **Caller** will be able to

open the saved-game file later (see 7.2).

Each player should launch *BATTLEGROUND: GETTYSBURG* and, when the Menu Screen appears, **Select Start Game as Modem Host** or **Start Game as Modem Caller** as agreed on beforehand. (If you're presently viewing the Scenario Selection Screen, Select **Previous** to go to the Menu Screen.)

For the Caller, a dialog box will appear, offering a choice of which game map to open. Be sure to Select the correct one for the scenario.

For the Host, a dialog box will appear, asking him to Select whether a new or a saved game will be played. Select a new game, and then the Scenario Selection Screen will appear. There, Select the appropriate scenario and the **Play** button.



Once the map and Modem Settings dialog box appear on-screen, the Host should configure his modem port. The most important setting is Baud Rate. If you're not sure what your

modem's baud rate is, choose something conservative like 2400. If you have a 28.8 modem, select the baud rate 38400. The next most important setting is Port. A typical configuration is for the modem to be on COM2 (if the mouse is on COM1), but you may have to consult your hardware documentation (or use trial-and-error) to find your correct setting.

Once the map and Modem Settings dialog box appear on his screen, the Caller should configure his own modem port. The baud rates need not be the same. The modems will negotiate the highest rate both can handle.

Both sides now hang up the phone.

The Host clicks **OK** in the Modem Settings dialog box, and should see the Answer Dialog showing that it is waiting for a call. He then waits.

The Caller clicks **OK** in his Modem Settings dialog box, and should see the Dial Dialog. He then left-clicks in the phone entry line and types in the phone number of the Host system (i.e., the phone number of the line connected to his opponent's modem). He may also type in an encryption key now (see 7.2). Lastly he Selects the **Dial** button or presses the **Enter** key, and the modem will call the Host. The Host system should answer after the first or second ring.

Momentarily both players should see the Communications Dialog (a "chat window"). This may be used by both players to type messages to each other. One or both players may close his Communications Dialog at any time during modem play. It will automatically reappear if the other side types a message or, if due to a data transmission backlog, the number of messages waiting to be sent reaches 20. It can also be re-opened at any time by Selecting **Communication Dialog** in the **Modem** menu.

Immediately after the Communication Dialog appears, so will a dialog box enabling him to Select the side he has chosen to play and, if both players have agreed, Fog of War. Once he does this and clicks **OK**, the scenario will be transmitted to the Caller. Only the player who goes first will see the Phase Box that denotes the first Movement Phase of the game. He should left-click with the mouse on the Phase Box to make it disappear, and he may then begin playing in the normal manner.

As the game proceeds, both players will see their own and

enemy units fire and move in turn. As each player completes a phase and advances the game to the next phase, the player who will be in control for that phase will see the Phase Box appear. He should left-click on the Phase Box and proceed with his actions for that phase. The Status Bar at the bottom of the screen will show whether the current phase is under Local (your) or Remote (your opponent's) Control. During a phase that's under Remote Control you should not attempt to move or fire any units, but rather wait until you see the Phase Box appear, indicating that you are now in control (i.e., it's your phase to move or attack). When the scenario is over, the Victory Dialog will be displayed for both sides to see.

If the game must be halted prematurely but the players wish to resume it later, the Host should choose **Save** or **Save As** in the File menu and save the scenario. Both sides then simply exit the program. Alternatively, after the Host saves the scenario he can Select **Host** and the Caller can Select **Caller** again in the **Modem** menu; doing this will close the scenario without exiting the program.

7.2 ENCRYPTION KEY

While the Caller has the Dial Dialog on-screen prior to the start of play, he should enter an encryption key (i.e., a password) in the appropriate spot in order to encrypt the saved-game file so that once it is saved the Host cannot open it. (If no encryption key is entered at this time, the file can still be saved later but it won't be encrypted.) The Caller should pick an encryption key that will be easy for him to remem-



ber but difficult for the Host to guess. It can be a word or a phrase, and numerals and/or punctuation marks can be used.

The extension *.btx* indicates a saved-game file that has been encrypted using the Caller's encryption key. Encrypted scenario files are stored in a binary format, and the user should not attempt

to view or print them directly without using the *BATTLEGROUND: GETTYSBURG* program.

When re-opening a saved game, the Caller must specify the same exact encryption key that was in use when the scenario was last saved.

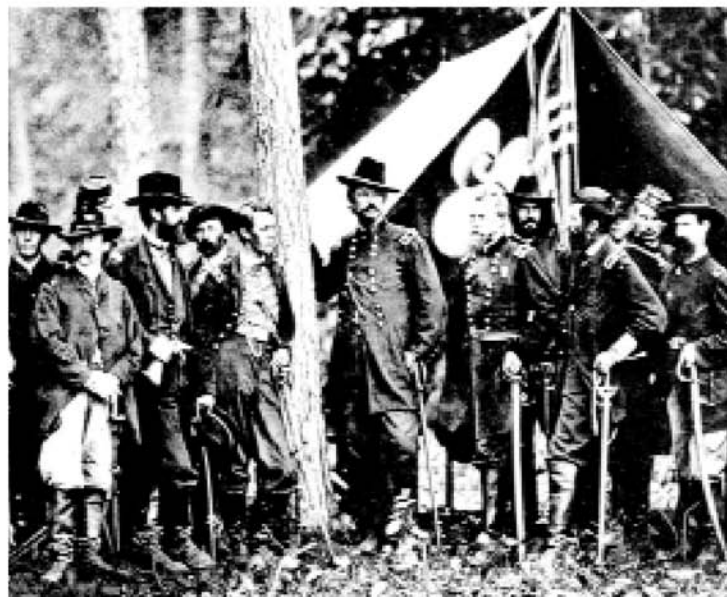
7.3 RESUMING A SAVED MODEM-PLAY GAME

The procedure for doing this is the same as starting a new modem-play scenario, except that when the Host is prompted to Select a new or saved game he must pick the latter. He then picks the agreed-upon scenario in the ensuing dialog box.

If the scenario doesn't open, the Host should check to make sure he Selected the right one. If that's not the problem, the Caller should Select **New Encryption Key** in the **Modem** menu and type in the key again, for he probably entered it incorrectly the first time.

7.4 NULL-MODEM PLAY

Null-modem play requires a direct cable connection between the two computers. Users should obtain a suitable serial communication cable and a null-modem connector (available at computer supply stores). Select **Null Modem** before Selecting **Host** or **Client**; that way, when **Host** or **Client** is Selected, you will still be prompted for the correct port and baud rate, but no modem dialing will be done. Note that under null modem, the *exact* baud rate for both machines needs to be Selected. Note also that some older machines may not have serial ports that can handle speeds at or above 9600 baud, so a lower rate may have to be used.



8.0 APPENDIX

8.1 TERMS & DEFINITIONS

[Certain terms and abbreviations used in this manual are defined here for your convenience]

Adjacent: Two units or hexes that are directly next to each other on the map, with no intervening hex between them.

AI: Artificial Intelligence; the capability of the program to make decisions and conduct actions for a given side.

Command Radius: The maximum hex distance at which a brigade or division leader can pass down a Command Rating modifier.

Command Rating: A rating ("C #" in the Unit List) given to a leader, and used by him in his attempts to Rally Disrupted units under his command. See also the definition of "Command Radius".



Detached: A unit (usually a regiment) that is outside the Command Radius of its brigade leader. A brigade leader who is outside the Command Radius of his division leader.

Disrupted: A regiment or battery that is not in Good Order but is not Routed. A Disrupted unit fires at half strength, and cannot advance into Melee.

Encryption Key: A "password" specified by the Caller in a modem-play game to keep the Host (the Caller's opponent) from opening the saved-game file.

Enfilade: A Ranged-Fire attack made from outside the defender's Field of Fire, or made vs. infantry in column.

Fatigue: A rating ("FA #" in the Unit List) given to a regiment or battery, and used by it for Morale Check and Melee purposes.

Field of Fire: The 120° arc through which a regiment or battery can fire. See also the definition of "Enfilade".

Fog of War: A game option that lets a player who chooses Fog of War for the *opposing* side see all of his own (i.e., friendly) units, but only those enemy units that have moved/attacked while *currently* in the LOS of a friendly unit.

Game Turn: Two consecutive Player Turns having the same turn number.

Good Order: A regiment or battery that is neither Disrupted nor Routed.

Hex: Each hexagon on the map. Hexes are used for movement, range and LOS calculations. The hexes are displayed/hidden via the **Hex Outlines** command in the **Options** menu.

Hot Spot: The red square- or hexagon-shaped indicator that appears on the map. The hex currently containing the Hot Spot is known as the *Hot Spot hex*.

Leadership Rating: A rating ("L #" in the Unit List) given to a leader, and used by him in his attempts to Rally Routed units under his command.

LOS: Line of Sight; an imaginary line between units that the program uses to determine if they can "see" each other. If the LOS is blocked (see the definition of "Obstacle"), they cannot see (and hence have no LOS to) each other. The existing LOS to/from the Hot Spot hex can be viewed via the **Visible Hexes** command in the **Display** menu.

Melee: An attack made from a hex adjacent to the defender during the Melee Phase, in which the attacker can advance into that hex if the Melee eliminates all defenders in the hex or forces them to retreat.

Menu Bar: The line in the screen display immediately above the map, which contains the titles of the various pop-down menus.

Morale Check: A die roll made by the program for a unit that has taken casualties due to an attack, or that is in the same hex as (or is adjacent to) another friendly unit that becomes Routed. The possible results are No Effect, Disruption or Rout; see **MORALE CHECKS** on p.30.

Objective: A scenario-specific hex with an assigned point value used to determine victory and defeat in a given scenario.

Obstacle: Terrain that can block LOS *through* its hex. Forest, Hill, Marsh, Orchard and Town hexes can block LOS, depending on the relative heights of the firer, obstacle and target.

Phase: Any of the four main segments of a Player Turn: Movement Phase, Defensive Fire Phase, Offensive Fire Phase, and Melee Phase.

Player Turn: Each turn in which one side or the other is the "moving" side. See also the definition of "Game Turn".

Quality: A rating ("QL #") in the Unit List) given to a regiment or battery, and used by it when it takes a Morale Check or tries to Rally. A Routed unit's Quality is considered to be "0" for Rally purposes.

Rally: A die roll made by the program for each of the Phasing Player's Disrupted units at the start of each friendly Player Turn in an attempt to return it to Good Order. A die roll made by the program for each of the Phasing Player's Routed units at the start of each friendly Player Turn in an attempt to return it to a Disrupted state. If successful, the unit is said to be Rallied.

Ranged Fire: Any non-Melee attack made by a unit.

Rout: A unit becomes Routed whenever it fails a Morale Check caused by either an attack or by the Routing of another friendly unit in/adjacent-to its hex.

Scenario: Each of the specific battles that are listed in the Scenario Selection Screen.

Select: To click on an item using the *left* mouse button.

ST#: For a regiment or battery, the basic strength factor used when it makes an attack. For a supply wagon, the number of units it can resupply. The ST# is displayed in the Unit List, and can change during play (i.e., it decreases whenever the regiment/battery takes casualties or when the supply wagon resupplies another unit.

Stack: The collective name for two or more units in the same hex.

Status Bar: The line at the very bottom of the screen display,

which contains the current time of day, phase, and hex coordinates of the Hot Spot.

Stragglers: A Routed unit that suffers another Routed result loses one or more strength factors (as determined by a die roll made by the program); such units are termed "lost stragglers" in the Command Report that appears at the start of the next Player Turn.

Strength Factor: See the definition of "ST#".

Unit List: The portion of the screen display immediately below the map, listing the data pertaining to each unit in the current Hot Spot hex plus a representative drawing/portrait of the unit.

CREDITS

Executive Producer: Jim Rose

Game Design & Concepts: John Tiller, Jim Rose

Programming: John Tiller

Game Graphics: Steve Langmead & Charles Kibler

Video & Sound: Jim Rose

Scenarios & Playtest Coordination: Joseph Hummel

Players Guide: Bob McNamara

Leader Biographies: Joseph Hummel & Matthew "ProPollock" Wenczkowski

Special Contributions: John & Greta Davidson

Special thanks to Capt. Patrick Barker and the U.S. Air Force Academy

8.2 HOT KEYS

Ctrl-N: Advance to next phase

Ctrl-U: Undo last movement

Shift: Displays on the map the names of various geographical features

Esc: Cancels A/I processing while the A/I is activated and the A/I Action Dialog is on-screen

Left Arrow: Scroll map to the left

Right Arrow: Scroll map to the right

Up Arrow: Scroll map up

Down Arrow: Scroll map down

F1: Invoke general Help

F2: Invoke Leader Help

F3: Invoke Scenario Notes Help

The following hot keys can be used to move units from one hex to another:

Keypad 1: Move Selected unit(s) down and left to next hex

Keypad 2: Move Selected unit(s) down to next hex

Keypad 3: Move Selected unit(s) down and right to next hex

Keypad 7: Move Selected unit(s) up and left to next hex

Keypad 8: Move Selected unit(s) up to next hex

Keypad 9: Move Selected unit(s) up and right to next hex

The following hot keys can be used to move units *within* their hex:

Keypad 0: Change Formation of Selected unit(s)

Ctrl-B or End: Move Selected unit(s) backward in hex

Ctrl-F or Home: Move Selected unit(s) forward in hex

Ctrl-L or Delete: Change Facing of Selected unit(s) one hex-side counter-clockwise in hex

Ctrl-R or Page Down: Change Facing of Selected unit(s) one hexside clockwise in hex

technical support

If you have a technical problem concerning the operation of our software, please contact our technical support staff. When you call, be at your computer if possible and have the following information ready: computer type, Windows" version, available hard drive space, RAM, and type of video card.

TECHNICAL SUPPORT: 1-410-821-7282

If you have a modem and would like to contact us on-line, you will find us:

CompuServe: To receive a free, introductory membership to CompuServe call 1-800-524-3388 and ask for Representative #694. Once you are on-line, type "GO GAMEPUB" and select section C or E-mail us at 75162,373

America Online: AOL introductory subscriptions can be obtained free by calling 1-800-827-6364. Once on-line, E-mail us at Talonsoft1

Genie: E-mail us at TalonSoft

INTERNET: E-mail us at 75162.373@compuserve.com

Microsoft Network: E-mail us at TalonSoft

TalonSoft grants the buyer of this software package the right to use one copy of the enclosed software program. You may not use it across a network, unless used in conjunction with another legitimate copy, rent or lease it, disassemble, decompile, reverse engineer, or modify the software in any way. You may not copy or distribute copies of the enclosed written material.

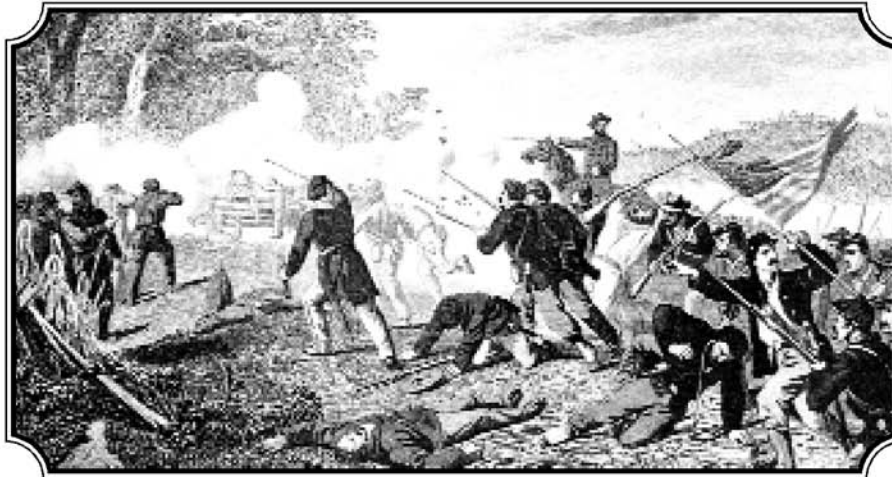
The enclosed software program, libraries, graphics, and all written material are the sole property of TalonSoft, Inc. and its suppliers and are protected under the copyright laws of the United States of America and all International Treaties.

This software product is sold AS IS and TalonSoft, its suppliers, dealers or distributors make no warranty with respect to the performance, quality, merchantability, fitness for any purpose of the software. The original purchaser must complete and return the enclosed registration card within 30 days of purchase. The enclosed media will be replaced free of charge for the first 90 days after purchase, providing you send the defective media along with a note describing the problem.

After 90 days, the media will be replaced for \$15 U.S.

Send to: TalonSoft, P.O. Box 632, Forest Hill MD 21050

**FREEDOM PRODUCTIONS
PROUDLY PRESENTS
LIVING HISTORY VIDEOS**



Freedom Productions has travelled from coast to coast videotaping a series of Civil War re-enactments. These entertaining and educational tapes are professionally narrated, attractively packaged and reasonably priced.

If you would like to receive more information about these tapes, please write to us at:

**FREEDOM PRODUCTIONS
P.O. Box 1388
Monrovia, CA 91017-1388**